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CURRENCY NOTE CIRCULATION.

The chronic discussion as to the scarcity, and the means of providing against the scarcity, of rupees in the currency office involves two very important factors, apart from coinage and the operation of the Gold Note Act. The factors we allude to are currency notes and rupees out of circulation. We will deal with the former only in this article.

We may take it that everyone recognises the great economy which must result to the Government, and consequently to the taxpayer, by the use of currency notes in monetary transactions; and our readers need not be reminded that the question of how to popularise the use of currency notes and so extend the circulation was submitted some three years ago by the Government of India to the Chambers of Commerce. The unanimous expression of opinion resulting from that reference was in favour of better provision being made for encashment, it being clearly recognised that the surest way of increasing the use of currency notes as money was to make them easily interchangeable for rupees; for by such provision the necessity of encashment would be lessened, and a preference for notes as a more portable and convenient form of money would naturally follow. The facility of encashment in the Presidency towns has had this effect and the use of notes by all except the small wage earning classes is visibly on the increase; but it would increase more rapidly were it not for the large sums which had to be transmitted for purchase of produce to outlying

districts, where ~~notes~~, owing to the difficulty of encashment, are not acceptable.

Confining ourselves first to Bengal alone we have some clearly defined district to which rupees in large quantities have annually to be sent because notes are not encashable; and the question is whether, if the Government Treasuries made provision to cash notes as presented in those districts, the notes transmitted would be presented for encashment, or whether the facility of encashment would lead to their local use as money. We think there can be no doubt whatever that the latter would result, not to the full extent of the notes transmitted, nor possibly to a marked extent for one or two years, but the residue of notes not presented for local encashment, and circulated as money would most certainly increase from year to year. We may mention such districts as Narainganj, Mozufferpur, Cattak, Mirzapur, Jalpaiguri and RaneeGUNGE.

The difficulties which face the Government in providing encashment of notes to an unlimited extent in such outlying districts are the cost of transmitting rupees to those treasuries, and the probability of the quantity supplied being in excess of requirements, thus entailing a frequent re-transmission of coin, and presumably a larger reserve of rupee coin in the currency office. The cost of transmission of coin to these districts would not be great, and would be, to some extent at least, minimised by the collections of local land revenue and road cess. In course of time the notes would naturally be retained to pay the Government dues, besides being utilised in local money transactions, and as notes came more generally into use there would be payments of coin into the Treasuries in exchange for notes. The transmissions of coin would therefore tend to decrease year by year, until the necessity for an excess supply of coin in the currency office would be less marked than at the present time, while the circulation would be largely increased. We fully believe that not only would circulation of notes in Bengal be largely increased by the adoption of this system but that the transmissions of coin which become necessary under the present system would be materially decreased, and not only would transmissions of coin to pay for the purchase of crops diminish, but transmissions of coin collected as taxes would be retained, instead of as now being sent to Calcutta.

It will be seen from this outline sketch that in districts where the requirements of rupees to pay for crops and the collections of Government revenue depend for collection and distribution upon a common centre, the double transit of coin can in a large measure be minimised by the employment of notes, and as the economy comes to be recognised in the districts, notes must of necessity become more familiar and popular.

It is different when the encashment of notes is granted outside the radius of a common centre of collection of Government revenue and the payments for crops, as for instance the optional encashment of notes in Lahore and Calcutta. For although, after the circulation of notes on the system suggested above had become popularised in these and other circles, a general encashment of notes might become feasible, it is evident that they must first secure a local habitation or there can be no economy and no general popularity. It is unfortunate that Cawnpore which is the largest trade centre of the United Provinces is not also the seat of Government, but that is no good reason why it should not be the financial centre of Government as it is of trade. The chief radiating points are Lucknow, Agra, Delhi and Allahabad and if notes were issued at Cawnpore and were interchangeable with rupees at the treasuries of the other towns, we can see no reason why notes of that circle should not automatically increase in general use among all but the small wage earning classes. The operation would be exactly the same as that which we have sketched for Bengal. The Punjab in a similar way would have Lahore as its centre, and Umballa, Amritsar, Mooltan and Jyallpur as its affiliated treasuries. The Bombay and Madras Presidencies could be similarly provided for.

We commend this system of popularising the use of currency notes in preference to that of general encashment, or as paving the way to that desirable end. It should commend itself to Government as the most economical, and in our opinion the most effective method of increasing the circulation at a minimum cost.

RUPEES OUT OF CIRCULATION.

In continuation of what we wrote last week we now deal with the second factor then selected as having an important bearing on the chronic question of rupee scarcity. **By Mr. Atkinson.**

Mr. Harrison have with great labour and skill adduced statistics to show, according to their respective reckonings, what is approximately the sum total of hoarded, or unused rupees in India, and although the total results arrived at differ considerably, they agree in estimating the total as not less than 150 crores. But taking it as only 100 crores, it must be admitted that this is an enormous mass of wealth to lie idle, representing as it does a loss to India of 3 crores annually, if calculated only at the low rate of 3 per cent. The interest on such hoards alone would be sufficient to absorb the annual fresh issues of Government loans.

Those who are chiefly responsible for keeping rupees and the wealth they represent out of employment are the Rajahs and wealthy Zemindars. We may assume that this system of reserve treasuries is not fanciful and has, or has had for its basis something more practical than mere ostentation. But when we come to examine the reasons for such reserves which may formerly have been valid, with the circumstances of the present time, it is not difficult to prove that the system is out of date and should, in the interest of the owners and of the country at large, be remodelled.

Let us first consign to the hecatomes of past history the days of internecine warfare and commence with the era of railways, telegraph and joint-stock banks. What, with the extension of these improved methods of communication, may be the existing reasons for hoarding large sums of rupees? Presumably the crowning reason is custom, which embraces many things that we need not pry into. Secondly these States and Zemindars, though embracing fairly large areas for collection, offer comparatively small scope for distribution. Whatever may be the merit or force of custom, the influence of self-interest, if studiously implanted, generally outweighs it. In the ordinary course old fashions give way to new, and the days of conservative isolation are passed. The *imperium in imperio* is drooping its worn-out dignity of gaudiness and sloth and is becoming federalised in the great Indian Empire. But the money bag system of finance still remains, a relic of the past days when society was divided into two classes, the robbers and the robbed.

What then does self-interest suggest? Obviously there are Rs. 3 crores of interest going abegging annually, and this is not a small sum. Why not take it? There can be no difficulty in

finding the donors if the simplest and most ordinary means are adopted to secure them. This is no evening star to wonder at. It is nothing more nor less than the establishment of local State Banks regulated upon the same system as the Presidency Banks in Bombay, Calcutta and Madras, in which a portion of the money from these reserve treasuries may be deposited. Whether such Banks would centralise the money of other members of the State may be open to doubt, but here again self-interest would step in, and an example set by the head of the State would have a powerful influence. All would be interested in a wider scope for distribution of Capital, and necessarily such Banks would communicate financially with all parts of India, and facilitate distant as well as local operations.

The working resources of these Banks would necessarily seek employment in the districts of greatest pressure, especially in the Presidency towns during seasons of tight money, by loans to the Government or the Presidency Banks. They could assist in financing Government, Municipal, Port Trust and other State loans. They could collect bills of exchange drawn upon local merchants and discount the bills of the latter on other parts of India or forward them for collection to other Banks, and so vastly improve and increase their local trade, and the trade of India generally. They would give a better tone and greater security to trade. And above all they would be a great convenience. Their establishment would attract other Banks to districts where they are now debarred by there being no central Bank of deposit. The money bag system would die out like a tribe of savages in the midst of civilisation. The country would gain enormously by this dormant wealth being awaked from its long sleep and converted into an active motor of finance and trade. The release of unused rupees would lessen the necessity for new coinage, and the extended use of credit would introduce and ensure a permanent and ever increasing economy.

REG. MUM. AT.

THE IMITATION JEWELLERY TRADE OF FRANCE.

While fine jewellery, set with gems and precious stones, maintains a fair ideal and commands choice designs, there can be no doubt that imitation jewellery has its satisfactory innings also. Indeed, its progress merits to be specially examined. Of course, its field of operation is relatively new as compared with the substantial realities that were born in the closing years of the sixteenth century, when art jewellers introduced cut stones into its composition. Thus, at the court of Henry IV., men and women used to cover their fingers with rings, their wrists with bracelets, and their necks with chains of several rows of pearls and precious stones. As the seventeenth century grew in years, so was a great impulse given to the luxury of personal adornment. Wealth was then concentrated in a few hands, whose possessors had taste, as well as means. There were also other contributing accessories; the art of cutting diamonds and the setting of precious stones had commenced to gain supremacy over the engraving and sculpture of gold and silver. Marie de Medicis was a good friend to jewellers, though she had a very great weakness for pearls. When Louis XIV., the "Sun King," ascended the throne enwrapped in wealth, he displayed great extravagance of style in the matter of jewellery. Louis XV. was in the hands of financiers; all tended to dazzle, to make an *éclat*, to display extreme ornamentation and consequent heaviness. With the reign of Louis XVI., taste became purer, forms more simple, work exhibited greater *finesse* or elaborate workmanship, while colours were more happily harmonized. In other words, artisans tried to acquire a style. All was original and delicate respecting ladies' toilettes. It was the zenith of bracelets, diamonds, collars, ear-rings, aigrettes, corsage-knots, and bouquets. Nor were gentlemen forgotten; they wore large rings called *fermant*; precious stones may be said to have then done duty as buttons on their clothes, their shoes displayed golden buckles, while snuff boxes became miniatures set in jewels.

These observations embrace the art points of French jewellery. Then, in subsequent years Charles Wagner introduced the processes of fabrication of Nielles that he learned in Russia. The important school of Froment-Meurice was established. Dural and Halphen spread the work of imitating gold and made it the *mode* in France. Castellani exhibited his important productions and Falize utilised with success the artistic ideas of the Chinese and the Japanese. Popular taste was being slowly but surely educated during this time, while, thanks to the extension of the trade in plated gold imitation jewellery, that branch of artistic industry, by the success of its designs, and the excellence of its workmanship, soon developed more and more the taste of the middle classes, who invested their money in a more expensive kind of ornamental goods that had the advantage also of representing a sterling value, and that could always be realised. Other important mechanical changes took the place of manual labour; machines became so perfect that artistic designs quickly followed as a matter of course. Still, with all these advantages, cheap jewellery would not have been a success had it not been for the aid of the blow-pipe and soldering. These protect the sharpness of the design, while permitting a portion of the object to be heated to the desired degree.

The covering of metallic surfaces with gold and silver is very ancient, but the industry was only mentioned in official documents in 1811. It acquired its great start from the International Exhibition of 1851, where the Duc de Luynes by his report on the process made it a success, and drew attention to its output. Strange to say, the French Government still opposed the imitation jewellery movement in every form. While other countries did the contrary, by employing a lowered standard of gold, France was bound to adhere to a fixed title or standard. That checked all exportation. The home trade was becoming tired of crosses, rings, and pins. Variety was wanted, so was cheapness; these soon appeared, not only in a diversity of objects for personal adornments, enriched with artificial precious stones, amethyst, garnet, pearls, coralline, agate, carnelians but in other respects also, &c., so the battle was soon won. The manufacturer of plated gold prepares his own combination of metals himself with gold of the ordinary standard, or if necessary, for the purposes of coloration of a certain alloy, and exerts pressure under heat, on a thick metal composed of copper, zinc, tin and nickel. The most

delicate lines and shapes of the matrice or die can be secured without the second metal ever appearing underneath. The output was really very good; occasionally the leaf or layer of gold over the copper was very thin and gave a dull appearance to the gold. The ability to successfully stamp the products was the closing operation in the process. The triumph led to serious trade quarrels, but in due course, the inevitable was accepted.

There are at present fifteen important firms in Paris occupied with the fabrication of imitation jewellery, having an annual trade over of eight millions of francs, and employing 4,000 hands—female operators being chiefly employed in polishing the products. The factories in which the work is carried on, are extremely well fitted up; the plank is modern, steam power is employed to drive cutting, stamping, punching die and polishing machines. It was difficult at first to turn out watch chains, as gold did not unite well with the alloy of silver and copper. Although Paris is the head centre for the fabrication of artificial jewellery, there are some thirty-five other factories in existence, distributed all over the Provinces; those of Lyons, Marseilles Tours, Bordeaux, &c., are famous, and well worth a visit. In the department of the Seine, of which Paris is the capital, there are no fewer than 4,000 master jewellers. Of these, 1,000 work only in pure gold, the rest are engaged in every variety of artificial products; but as a very large number of the masters work in their own homes, assisted by members of their families, it is difficult to make any other, but an approximate computation of their number. One Parisian manufacturer has no fewer than 500 different patterns of watch-chains, 2,000 models of sleeve links, and other shirt buttons, 2,000 patterns of ear-rings, to say nothing of finger-rings, bracelets, brooches, neck-chains &c. There is now no difference between the designs of real and artificial jewellery, as the same artists work for both. Employers, and many of the most distinguished among them, when low in funds, are known to supply sketches to the lower grade of jewellery—on the sly (*sic*).

E. C.

*LIFE OF ONE OF THE EARLIEST INDIAN
ATTORNEYS OF THE SUPREME
COURT OF CALCUTTA.*

II.

We are desired by the writer, Mr. K. L. Bonnerjee, to place before our readers the following corrections sent by Mr. W. C. Bonnerjee all the way from 3 Pump Court, Temple E. C., London, England, on the article of the life of his much-respected father that appeared in the *September* number of our *Magazine*.

Pitambur Bonnerjee, the father of Grees Chunder, had a house given to him by Babu Tarini Churn Banerjea of Salkea in Noyan Chand Dutt's Street and he made it his town residence. "For years" writes Mr. Bonnerjee, "the outer door of the house had the inscription '*Tara Charan prasadayat*' meaning that Tara Charan Banerjee had given the house to our grand-father. I remember seeing the inscription and ascertaining its meaning from a gentleman named Prem Chand Paul who was a rich man at one time but unfortunately lost his property and became in his latter days a dependent of our grand-father."

Mr. Bonnerjee thus describes the various changes that Messrs. Grant & Rogers' firm underwent where his father first served—"His (Grees's) father (Pitambur) removed him from College after a few years and got him a berth in his own office which was then carried on by Mr. Grant, the then Government Solicitor and his partner George Rogers under the style of Grant and Rogers. When Mr. Collier retired, the firm was Collier, Bird and Grant. It then became Bird and Grant, then Grant and Rogers, then Grant, Remfrey and Rogers, then Grant and Rogers, then Remfry and Rogers, then Archibald Rogers, then Rogers and Remfrey, then Remfrey and Rogers, then Remfrey and Remfrey, then Remfrey and Rose and now Remfrey and son."

Then Mr. Bonnerjee goes on to say—"In the year 1850 Grees Chunder was articled to Mr. George Rogers and in the ordinary course he would have appeared for the Attorney's examination in 1855. But his father having died in 1853, the burden of a large family fell on his shoulders and as his salary from his employers was not very large, he had to work both mornings and evenings to earn money. And he used to attend office rather late. Mr. Archibald Grant, the head of the firm, objected to his coming late and said that he would increase his salary to Rs. 150 a month but he must come early. Grees Chunder was only able to attend office early for a short time and again fell into his old habit of going there late. This displeased Mr. Grant who informed him that unless he came to office in good time his services would be dispensed with. At this time a heavy suit of the Sobha bazar Raj family was pending in the Supreme Court in which Messrs. Grant and Rogers were Attorneys for some of the defendants and Messrs. Allan and Judge for other defendants. The case of Messrs. Grant and Rogers' clients was in the hands of Grees Chunder who had drawn an answer for them and this answer as drawn was sent to one of their clients who was Maharajah Kamal Krishna, a great friend of Grees Chunder and his family. Mr. Allan happening to call in the Maharaj Bahadoor saw the answer and was so struck with the ability with which it had been drawn, that he asked what counsel had drawn it. He said that no counsel but Grees Chunder, an articled clerk at Grant and Rogers had drawn it. Mr. Allan at that time was contemplating practising in the Sudder Dewany Adalut and was desirous of having a competent man in the firm to whom he could entrust the bulk of his business. He asked the Maharaja if he could not get Grees Chunder to join him, Mr. Allan. The Maharaj said that differences had arisen between Grees Chunder and Mr. Allan and that the former had received notice of discharge from Mr. Grant. On this information, Mr. Allan saw Grees Chunder and at once engaged him at a salary of Rs. 250 a month. But Mr. Grant did not like to part with Grees Chunder and raised so many objections to his joining Mr. Allan that for two months he sat at home doing no work but drawing Rs. 250 a month from Mr. Allan at Mr. Allan's special request. The dispute between Mr. Grant and Mr. Allan over the devoted head of Grees Chunder was referred to the

Attorney's Association who decided in favour of Mr. Allan and Grees Chunder was then able to attend Mr. Allan's office. Mr. Grant, however, would not allow Mr. Rogers to transfer Grees Chunder's articles and as these articles were cancelled and Grees Chunder in 1854 entered into fresh articles with Mr. Allan. Mr. Allan had made it a condition that Grees Chunder should attend office early and for a time he did so, but as Rs. 250 a month was found insufficient to enable Grees Chunder to meet the expenses of his family, he had to resume his morning and evening work and he could not go to Mr. Allan's office in time. At last Mr. Allan having ascertained from Grees Chunder that Rs. 400 a month would enable him to give up his work in the morning and attend office early, Mr. Allan raised his salary to that sum and he received it until on the retirement of Mr. Lingham who had him made a partner in the firm in 1856, from the firm Grees Chunder became a partner shortly after having passed the Attorney's examination what he did in January 1859 and the firm was called Allan, Judge and Bonnerjee.

About Grees Chunder's becoming the sole partner of the above-mentioned firm, Mr. Bonnerjee writes:—"When the High Court was established in 1862 a rumour was set afloat that attorneys would not be allowed to plead on the Appellate side of the Court. This frightened Mr. Allan who withdrew his name from the roll of Attorneys and confined himself to practising as a Vakil. His interest in the firm was taken over by his partners, Mr. W. J. Judge and Grees Chunder and the firm was afterwards conducted under the style of Judge and Bonnerjee."

As regards any property bequeathed by his father and his will Mr. Bonnerjee writes:—"My father did not leave much property when he died. Besides his family dwelling-house which I had to pay Rs. 10,000 to get released from a claim upon it and a small house in Dhurumtolla Lane which fetched Rs. 20 a month, he had the equity of redemption of certain houses in Calcutta which yielded him about Rs. 190 a month gross. That is all he left. And he died without making any will. A fortnight after his death and when I was still away from home, my mother obtained Letters of Administration from the High Court to her estate and Babus Rajender Misser, (some time Reporter, Bengal Law

Reports) and Bhoyrub Chunder Bonnerjee, Vakils, High Court, Calcutta, stood surely for her."

We hope our renders will not take it amiss if you quote *in extenso* a letter written by Mr. Bonnerjee on 18th August 1865 to his uncle from Paris, which will throw light upon the state of Hindu Society at that time.

HOTEL DU LOUVRE,
PARIS,
18th August 1865.

DEAR UNCLE SAMBHU CHUNDER,

I do not know if I ought to apologize for not having written to you so long. I have been in considerable doubts as to whether or not my letters would be acceptable to you and therefore did not write. If my apprehensions were unfounded, you will, I hope, be pleased to excuse me.

I believe you have heard that I am getting on in Europe as my best of friends could wish. Though my arrival in and my position there after my arrival were beset with considerable difficulties (the former proceeding from extremely reasonable and foolish obstinacy with which every one in any way connected with me opposed my departure from India and the latter from my being a total stranger here) I soon surmounted them and I can now congratulate myself that my life in England has been one of peculiar success and felicity. I have discarded all ideas of caste, I have come to hate all the demoralizing practices of our countrymen, and I write this letter an entirely altered man—altered in appearance, altered in costume, altered in language, altered in habits, altered in ways of thought, in short, ~~altered~~ and altered for the better too—in every thing, I should say in *all* things which have contributed towards making our nation, the hateful of all others in the world, It will take up more time and space than I have now at my command to detail how and in what respect these alterations have taken place. Suffice it to say, that, however ill-bred a person may have been from his earliest infancy, however ruinous the influences around him, however grossly his reason may have been made to pervert, the genial soil and civilized atmosphere of Europe and particularly

that of England are enough to make him a *Man* in the truest signification of the term the moment he comes there. I am proud to say that I had not all these enemies to contend with before I left for England. I, however, had my quota of evil effects of an early *Bengali* life and now that I have got rid of them, I can value them at their true worth and especially so, when I contrast them with all that I see in *Europe*. I think it will be a very interesting subject, if any body were to find out the reasons of our nation being so degraded at the present time while even the barbarian Tartar is improving in civilization so rapidly. That we are in a degraded state I do not think anybody in his senses would attempt to deny. Well, if so, why so? Some of these reasons are so obvious that they at once occur to anybody considering the subject. You doubtless know them, I shall consider them when I next write.

I left London yesterday morning for two months' trip on the continent during our Long Vacation. I purpose to visit Switzerland, Germany, France of course (as you can see from the place where I write this from) and I am not sure but may pierce into Italy. Paris is such a lovely place! I do not think they exaggerate at all who say that it is the finest city in the world. I have not, as you know, seen the whole world but my opinion of Paris, I build upon the given fact that London and Calcutta, are *emphatically* (?) the two best cities. Compared to Paris, London is a regular black-hole and Calcutta, with its *Noyan Chand Dutt's Street* and Panchee Dhobaney Gully though styled the City of Palaces cannot even stand a comparison. I think it is extremely unjust to compare *Paris* with *Calcutta*. The difference between them is as great as between the *Government House*, Calcutta and the *Belvedere Palace* and 28 Noyan Chand Dutt's Street and 29 Noyan Chand Dutt's Street respectively. I arrived at Paris last night and went out for a walk along the *Champs Elysees* (Fields of Elysium). Oh! how beautiful it looked. I cannot describe to you all that I saw. It is beyond all description.

But I am afraid I am wearying you. I must therefore conclude. Write to me please as often as you can giving me your candid opinion on *Bengali* society generally. My address in England is given below

Hoping yourself, aunt Sambhu Chunder and the little one's not excepting Pundit are in the enjoyment of excellent health and spirits.

I remain,

Your affectionate nephew,

W. C. BONNERJEE.

BABU SAMBHU CHANDRA BONNERJEE,

Calcutta.

P. S.—Here is my address in London.

W. C. BONNERJEE,

108 Denbigh Street,

St. George's Road,

London, S. W.

THE EDITOR.

A HISTORICAL REVIEW OF EDUCATION IN INDIA.

II.

We have seen before, that in India Western education is not synchronous with the foundation of the Universities, but its history takes us back to the early thirties of the last century. The year 1835 marks an important epoch in the educational annals of our country. In that memorable year, Lord Macaulay, put end to the "cyclonic controversy" which had raged in the council and divided the members of the committee into belligerent factions. The memory of the "battle between the anglicists and the orientalist" lies embalmed in the pages of official records not in a decayed and calcined man as in a grave, but fresh and vivid, clear and distinct, as in life. It lies beyond the brief compass of this paper to reproduce and dwell at length on the controversy the glowing embers of which are still red, but the following utterances of Lord Macaulay, may be read with profit and deserve to be pondered.

"Within the last hundred and twenty years, a nation which had previously been in a state as barbarous as that in which our ancestors were before the crusades, has gradually emerged from the ignorance in which it was sunk, and has taken its place among civilized communities. I speak of Russia.

* * * * *

The languages of Western Europe civilised Russia. I cannot doubt that they will do for the Hindus what they have done for the Tartars."

The next eventful year, in the history of education is the year 1857. In the same year in which the Mutiny whirlwind swept over the land, a new light dawned upon the intellectual horizon of the country. Universities were founded in the Presidencies of Bengal, Bombay and Madras with a view to diffuse education amongst all ranks of British subjects irrespective of caste, creed,

colour and religion. The newly-founded Universities became the centres of light, which irradiated and illuminated the strongholds of darkness and ignorance. India entered upon a cycle of intellectual life; emancipated from the bondage of ignorance, rescued from the slavery of prejudices, unfettered by the cruel bonds and trammels of superstition, freed from the tyranny of Regenerated India, felt the pulsation of a new life throbbing and thrilling as it were through all her veins and arteries.

The memorable despatch of Sir Charles Wood, (afterwards Lord Halifax) the educational saviour of India contained the germs of the educational policy of the Government. This luminous despatch rightly described as "the Magna Charta of High Education" in India laid down the means and methods for engineering educational operations in India. In conformity with the lines of the celebrated despatch, the educational machinery of the country was equipped. Colleges were established to impart higher education, schools were established to promote the growth of secondary education, and schools of lower grades were set afoot with a view to spread primary or rudimentary education amongst the masses. A net-work of schools and colleges, traversed through the entire area of the country, diffusing light and knowledge, to a people long stepped in darkness and ignorance. The dawn of a new day shone everywhere, the night of ages gave way.

The next important landmark in the history of education is represented by the Education Commission of 1882-83. It was felt all round, during the Viceroyalty of Lord Ripon, that the then educational machinery had gone out of order, and in response to the huge outcry Lord Ripon appointed a Commission to investigate the then state of education in India. This committee flashed the bull's light of enquiry into all corners of public representations and eventually embodied their observations in a lengthy report. Thus a fresh impulse was given to the cause of education; the functionary organs of the educational systems, being infused with fresh vitality, worked smoothly and harmoniously. The history of the movement of education during the next two decades, presents few ups and downs and is almost barren of events. A fresh motive power was breathed into the educa-

tional organisation, the wheels and axles being greased and lubricated, the entire machinery moved with accelerated force and energy. The progress of education during the first decade is indicated by the following table,* which bears out with unwarrantable significance the fact that not only has the powerful sunlight of High Education penetrated the gloom which had lain thick and heavy upon the people, but that the feeble lamp-light of Primary education darted forth its rays into the inmost recesses of darkness, whose safe curtain hang like a pall over the masses. It will also appear that since the foundation of the universities was quickened by the E. C. of 1889, the star of high education has always been in the ascendant. The high figures shown in the table below bears eloquent testimony to the fact that education is no longer looked upon as the close preserve of a privileged class but as the common property of the people. The vast amount of mental waste reclaimed by this agency brings into the relief the fact that education is the sole key which unlocks the doors of the great common wealth of culture.

It is a staple complaint uttered by thoughtful men interested in the cause of high education that the present cram and hot-bed system of examination has deluged the country with an army not of intellectual men but of intellectual machines. There is also an absolute consensus of opinion between the highest expert and the man-in-the street that the present race of graduates is to the older as Hyperion to Satyr. The fusion of the East with the West, gave to India some brilliant geniuses, who were pioneers of great reforms. They piloted stirring social, religious and moral reforms of the day, and left an enduring mark in the pages of history. The westerning of India gave birth to great intellectual giants, before whose stupendous achievements the modern mind reels. The transplanting of the educational flora from the hot-house of the west was effected at a date anterior to the foundation of the Universities, and the history of intellectual movement falls into two periods—(1) The pre-university *regime* when attempts were made to domicile European learning, literature and science in this glorious 'land of wisdom,' (2) the University *regime* when knowledge was focussed in three great centres whence irradiation of its rays would proceed to all quarters.

* The reader's attention is respectfully invited to the figures in the Appendix.

Ancient India, the home of the fair skinned Aryans, who held high the lamp of knowledge, which has burnt through all historic ages was quickened into life when the glamour of the light first fell upon her eyes. Her long sleep ended and once more she nerved herself to move onward the Sacred lamp. Her sons raised their heads once more above the dark and unholy waters of repression that had stagnated thick and heavy through long and weary centuries. They became the pioneers of a new school of thought, the founders of a new system of literature. The sacred flame, feeble and flickering to the verge of extinction, was borne along by a band of zealous and devoted men, who have inscribed their name in the scrolls of fame; of these votaries, who took up the intellectual running, the foremost man was Raja Ram Mohon Roy. That enlightened Brahmin was a true seer of light; he was the father of Bengali Prose and the founder of a national system of religion which has its basis on the holy texts of the Upanishad. His great mind, saturated deep with classical erudition, and fired with genuine apostolic fervour, gave birth to a system of spiritual philosophy which saved the Bengali nation from being the perpetual heir-in-remainder to an elaborate pantheism that grew up in the Pauranic age. He preached an exterminating crusade against the dark system of idolatry which convulsed the faith of the first fruits of English education on Hinduism.

The statistics of the last decade, taken at the threshold of the 20th century signifies with singular precision the high water-mark at which education stood during the closing years of the 19th century. Our note is one of triumph and rejoice when we measure the extent of progress by the numerical standard. But the sentiment of joy sinks down when we ply the probing knife of criticism into the apparently sound and healthy system of education. Judged by the test of efficiency, utility and originality it at once becomes manifest that education is suffering partial eclipse. Anxious statesmen peering to the mist which shrouds the phenomenon and ponder on the probable results foreshadowed by it. Veteran educationists sorrowfully realize that underneath the tranquil surface, there is a seething volcano which may burst out into phenomenal violence, shaking the very foundation on which the crowning edifice of knowledge stands. Great events project

their shadows before, and the Viceroyalty of Lord Curzon read in the shadow the premonitory symptoms of a great cataclysm.

Raja Ram Mohun Roy's mantle fell upon the great Keshub Chandra Sen, who with a tincture of University education, produced a stir in the religious world of his days a vibration propagated over India and England. This great prophet of light and leading, effected a silent revolution of thought which swept away much that was intolerably evil. The lurid storm raised by the Brahmo somaj, the trophy of his victory over the Philistinism of the day, cleared the atmosphere of much moral malaria. In the field of religious controversy, entered a general of consummate ability, in person Swami Vivekanand, whose exit from the world is regarded in the light of a national calamity. This knight banneret, equipped with the mighty artillery of Vedantism, rushed into the great tournament in the Chicago Congress of Religions, and came out with flying colours—to the glory and triumph of his countrymen. He proclaimed from the pulpit, 'in words that breathe and thoughts that burn' the spiritual mission of India to the nations of earth.

Of the radiant group of stars, which for years past is illuminating the intellectual social horizon of India, the glowing memory of Pandit Iswar Chunder Vidyasagara is one whose destined to live in the hearts of his countrymen. Born in poverty, with hard seniwes for struggle, he had to rough hew his way through this rugged and thorny path of the world, and obtained for himself a prominent place in the aristocracy of letter. But his literary gifts and attainments do not alone immortalize him to posterity. His noble catholicity, his unbounded sympathy, his unremitting toil in mitigating the appalling sum of human misery, allied to his genuine scholarship, his scorning delight and living laborious days saved his memory from being swallowed up in the abyss of time. The movement of widow remarriage initiated by the Venerable Pandit cast a bombshell in the fortress of orthodoxy. He was looked upon as a singer of revolutionary ideal ; became the target of vituperative attacks from all sections of the native community. He stood firm amidst these fiery ordeals, and proved himself a greater man. His successor in the literary world was the late Babu Bankim Chunder, who perfected the modern Bengali Prose. He was a great literary artist, who glowed the literary canvas with the light

of his genius. His novels, interpenetrated with sublime ethical teachings, (with a historical event for the background) and saturated with platonic worship of ideal beauty in all its forms have secured for him an abiding place in the literary pantheon.

The literary genius of Michael Madhosudan Datta also unfolded itself under the soft and silken touch of western education. His matchless creations, breathing fresh and deep melody, offer ample evidence of intellectual progress and mental expansion. English education also fashioned the wit of the late Denobondhu Mitra, the magical touches of whose pen are full of human sympathies.

In the field of antiquarian researches, the towering personality is Raja Rajendra Lall Mitra. Deeply imbued with classical culture, gifted with native talents of a high order, he exploited the rich resources of his mind upon the vast *terra incognita* and staggered the learned world of his days by startling and bold discoveries. He disinterred the vestiges of an almost forgotten civilization and left stupendous works on the subject of history and archæology, before which our minds reel.

The westerning of India gave us a great scientific genius the late lamented Dr. Mohendra Lall Sarkar. This devoted votary to the altar of science, gave striking proofs of originality in his early career. He consecrated his learning and energy in extending the boundaries of the realm of science, where he unquestionably held the sceptre of authority. The Science Association, the living monument of his efforts to popularize and facilitate the study of science, will preserve the glorious record of his life and doings. His sacrifice of personal interest, the courage of his convictions, his loyalty to truth, the yeoman's services he rendered to his country are there well worthy of imitation to the rising generation of Bengal.

Under the fostering care and formative touch of western education, figured some great men who were commanding figures of the world's stage—men who piloted the great social and political movements of their age. In the master roll of unselfish patriots who lived and laboured incessantly for the good of the country, stand forth Babus Digamber Mitra and Kanto Dass Pal. They were both for many years the life and

soul of the British Indian Association and solved intricate and knotty political problems by their keen-edged intellect and sagacity in practical politics. They faithfully discharged the duty of interpreting between the rulers and the ruled, and both made their exit from the stormy arena of politics crowned with decorative laurels.

The history of pre-University education bristles with the names of the Rev. K. M. Banerjee and Babu Peary Charan Sarkar, persons whose memory can never be relegated to the limbo of inanities and oblivion, they are prominent landmarks of the times. The unbounded learning of the Rev. K. M. Banerjee, allied to his marvellous knowledge of several languages, his sincere, at the same time, vigorous co-operation in all social and intellectual movements, and lastly his scholar-like labour and researches in the field of Sanskrit learning assigns to him a permanent place in the enduring pages of history. Of Peary Charan Sarkar, more can be said than a brief notice in this small space. It will not be at all euphemistic to call him the Arnold of Bengal. The living generation of scholars and poets, pedagogues and priests, lawyers and statesmen, are his intellectual creations. He not only adorned the humble calling of teacher, but elevated and dignified it by the glorious deeds which still speak in trumpet tone of his high moral virtues and intellectual worth. He breathed into the youthful minds of his pupils ideas (which are more potent than boyonets), which refined their tastes, expanded their imagination and vitalized their intellect. Thus equipped, they sallied forth, armed with the weapon of a higher civilization, to battle with the rampant evils which were eating into the vitals of our society. Nor did his life-work lie on the lines of pedagogy, in him our country found a valiant knight, who like the "Sir Guyon" armed *cap a pie* with the invincible armour of virtue, overthrew the tyrant monster of drunkenness and ushered the mild reign of "temperance." Such were the great heroes, who lived and laboured for their country, careless of fame and indifferent to wealth and social position. Their lives are studies of unselfishness, service and in the propagation of light and knowledge, virtue and morality to their forlorn and ship-wrecked humanity.

In the southern and the western presidency, the great leaders of thought and action, whose deeds are chronicled in letters of

gold in the pages of history, drew their inspiration from the nascent flame of western knowledge. By virtue of the rays prolific which shot from the west, southern and western India emerged from the darkness and squalor of ages to wrestle against ignorance and prejudice, the cankers of the soul. The impact produced on the mind by the inroad of western ideas, and the forces brought into play by the reading of western history and science, found their highest expression in the late Justice Ranade. Endowed with rich mental capacities, cultivated and developed by master hands, Justice Ranade acquitted himself nobly in the great ordeal of life. He was the first graduate who was decked with the laurel of the M. A. degree, he was a judge of keen intellect and fine legal acumen. But his fame as a judge or jurist pales before the glory achieved by him in other humbler walks of life. With him rose the morning star of social reformation. His stirring speeches from the platform, have opened up new vein of thought in our minds, and set afloat ideas which will inaugurate happy eras of social existence. His example roused the dormant energies of the slumbering nation and led them into useful channels of activity. The name and memory of the late Dr. Doji is a dower to his nation. His life-long devotion to learning, in the midst of distracting and absorbing public occupations commands our earnest attention and serves as a lever to lift ourselves from humble slough of mammon worship to higher and purer pursuits of the intellect. His gigantic labour in the field of Sanskrit literature, and his unique and unexampled perseverance marks him as the Max Muller of his age. The lives of the brothers Dogi are remarkable and give an impetus to those failing spirits who are caught by the contagion of learning.

The annals of Western education treasure up the memory of Justice Muttuswami Iyer, whose life is pregnant with lessons of wisdom. The great Sir Syed Ahmed, who made his exit from the theatre of life rather early, was a character of whom any nation or any country might feel proud.

Thus amidst the faint glimmerings of light were reared our men, who did not sleep under the shade of their laurels but up their loins to accomplish the intellectual salvation of their countrymen. They were pioneers of social and moral reforms which revolutionized the structure of society, and ushered the dawn of a new day.

Being adopted into the rich inheritance of West, they made stupendous efforts to weed out the tares of ignorance and superstition which are the fertile breeding grounds of social and moral plagues. There were the true salts of the country. Being inspired with the lofty ideal of duty, they embarked upon a career of action, they lifted up the men of their ages to higher moral and intellectual planes shedding light and culture to the obscurest corners of the country. They actually performed the very deeds, with which Mr. Reynolds exhorted the graduates to do at the Convocation speech of 1883. "If you cannot give money, you can give your time, you can give your knowledge, you can give your example,.....you can do much to raise the tone of society around you, to dispel prejudices, to foster education, to elevate women to her proper place, and to show by your daily lives that the most cultivated man makes always himself the most useful citizen." A glorious message indeed in a glorious language. True culture is not synonymous with passing examinations and then to lead an indolent and infructuous life, it is something more than this childish triumph, it means assimilation of increased light and sweetness. The ideal which inspired them in this uphill journey of life was one of unselfish and disinterested action. The intellectual gospel of the present age demands "a pass" as the *summum bonum* of earthly existence, a sacrifice of genius at the altars of examination. The old ideal has dwindled into a hungry appetite for diploma as the "open sesame" to social and official position. The old and time-honoured love of learning for its own sake has been alloyed with a desire for bread-winning. The majority of them are as useless as the forgotten shells in the battlefield.

A survey of the muster-roll of our illustrious worthies of the past leads us to ask who amongst us is the budding Bankim Chandra? On whom will the mantle of Vidyasagara fall? or who is the born heir to the heritage of Dr. Sirkar's scientific researches? Who takes up the intellectual running after Justice Ranade? We look with feverish anxiety for successors to the intellectual inheritance, but, in this high noon-tide of University Education we find a handful of votaries. Has talent degenerated? Or is the country barren?

The seeds of knowledge were sown with a liberal hand on the

soil of the East and the fruits were luxuriant and sweet. But how does it come to pass that the same seeds are sown on the same soil, but the harvest is poor and of inferior description? There is a chorus of complaint to the effect that the present standard of culture does not promote intellect or sharpens understanding but it develops memory at the sacrifice of originality. Educational experts are at one in declaring the present system faulty. They have discerned dark-spots in the sun of Higher University Education, while the mass of the lay people rejoice thoughtlessly in its cold beams and drinks its light into their souls. Their views meet with adequate and firm support from men like Sir John Strachey, Williams and Sir W. W. Hunter. The authoritative utterances of Sir Alfred Croft, the luminous speech of Lord Reay, the learned observations of Sir Richard Temple, the ponderous pages of Dr. Chamberlain, and last though not the least, the serried phalanxes of *brochures* from the learned pen of Dr. Murdoch, created gentle ripples, over the tranquil surface, till the Viceregal pronouncement of a new policy has resulted in breakers which dash violently against the effect and time-worn system.

The spirited writings of some of our leading Indian educationists kindled the flame of agitation, and the breath of honest and level-headed journalists fanned the fire.

The problem of educational reforms is one fraught with the deepest importance to the heterogenous ranks which compose our social hierarchy, and hence it is evident that every section of the people has been caught up by the whirlwind of agitation. The controversy rages at fever heat in the council chamber, the heated atmosphere of public meetings rings with noises of protest resolutions, while public prints teem with excited and hysterical articles. The excited and fevered utterances of the times resemble the wild and loud screams of the patient whose ulcer is being mercilessly opened by the surgeon's lancet, such a patient can not entertain a superstitious love for the lancet, which cures him of the fell disease.

Sir John Strachey who bore "the whiteman's burden" has recorded the following lines which deserves serious reflection :—

"The best results of English education in India are seen in the native surgeons and in the native Judges and not in those whose education has been merely literary, such have not been successful

as engineers. As a rule they dislike physical motion that can be avoided" (India, its administration and progress P. 273.)

The recent deliverances of Lord Curzon in the educational conference of 1901, at once commands our respectful attention. It also indicates beyond the shadow of doubt that while sounding the trumpet of reform, His Excellency did not fail to lay due stress on the sunny side of the system.

"Crude and visionary ideas and half education in our products of education are far too plentiful. But I firmly believe that by the work of the past three quarters of a century, the moral and intellectual standard of the country has been raised, and I should be ashamed of my country if I did not think that we are capable of raising it still higher."

A noble resolve in a noble language, the first fruits of this resolve was the summoning of an educational conference at Simla in September 1901. This conference was presided over Lord Curzon himself, a distinguished University man, the *personnel* consisted of men grown gray in the educational service and persons of experience, and high official position. His Excellency's luminous speech delivered on the occasion is a valuable contribution to the literature of the subject. He does not attempt to strangle high education by drawing closes round its neck strings of reactionary and retrograde legislation, but his masterly intellect, acute powers of observation, his imperial intellect, enabled him to prove the educational system thoroughly and discover the less sound parts. The whole field of education was carefully surveyed and the issues raised were important and numerous. The following extracts signifies the depth of his observation and the force his generalizations.

"We go on sharpening the memory of our students encouraging them to the application of purely mnemonic test, stuffing their brains with abracadabra of Geometry and Physics and Algebra and Logic, until after hundred, nay thousands have perished by the way, the residue who have survived the successive tests, emerge in the elysian fields of the B. A. degree."

But even in this diseased system, there is healthy blood, our universities present some redeeming features which has tempered the scathing comments of the most envenomed critics. The darkest cloud has its silver linings, and so the defects of the

present system bring into relief some merits which have found utterances from the tongues of no less a person than Sir Alex. Mackenzie. His burning words, replete with sound administrative wisdom should be stamped on the memory speaking to a body of newly-fledged graduates, bearing the *impresature* of the Allahabad university, on the improved moral fibre of the public servants, (who held trusted offices without the least breath of scandal,) he eloquently observed:—
“ This improvement of the moral standard in the public service and in the professional and commercial life manifests itself in many ways, perhaps the most interesting and hopeful lies in the better conception of duty and responsibility which is spreading in the attentive and reverent respect now being paid to the purest ethics of the earlier creeds, and in the efforts now being made to purify caste customs and rites of their extravagances. These are great gains; they are progressive and cumulative, and they should not be forgotten by any one who undertakes to weigh our educational system in the balance.”

The testimony of facts from the able pen of Dr. Miller, who has been long years at the helm of education in the southern Presidency, furnishes in the long chain of documentary evidence in support of the honesty and usefulness of Indian graduates. He candidly acknowledges that the fruits of education may be hard, unripe but never rotten.

The observations voiced forth words that fell from the lips of Dr. Croft, a potent voice and a determining influence in matters of education are too momentous to escape attention and he emphatically asserted in the annual convocation of 1894, that there were original scholars cultivating the field of knowledge, but their number could be counted by the fingers. His re-assuring remarks bid fair to hope that there are life-long votaries of knowledge who scorn delight and live laborious days in dignified poverty.

His excellency staggers at the perpetual grinding and cramming of Indian students from their initiation into the alphabet to the crowning of their heads with the laures of degrees. In this feverish struggle, several succumb under pressure of intellectual efforts while students of sterner stuff cross the Rubicon of the B. A. examination. We are told on the high authority of His Excellency that one in seventeen ultimately takes the B. A. degree. The symptoms do not betoken a sound and healthy state of things.

His Excellency rightly realises that in the domain of intellectual culture, the great despot of examination wields its sceptre universally and absolutely. This cruel tyrant has opened the gates of the "Temple of knowledge" to votaries who wooes her at her high shrine for "pelf and profit," for fame and fortune. The acquisition of learning is not an end in itself, but is sought for as it serves as a means to some selfish, sordid aims and *alma maters* have flooded the land with graduates and undergraduates. Some people who begin a titanic struggle in the troubled waters of the learned professions while others swell the ranks of place-hunters. This is the most prolific of errors and His Excellency deplorably says.

"Finally by making education the sole avenue to employment in the service of the State, we unconsciously made examining the the sole test of education."

He is grievously shocked to notice the application of intellect towards purposes which blight its higher potentialities, "It is no use to turn respectable clerks and munsiffs or vakils" he justly exclaims, "if this is done at the expense of the intellect of the nation."

The keynote of his educational policy appears to be struck by the following lines. "To lift high education out of the furrow if we can, before it is dragged down and choked by the mire." But unlike an empiric or charlatan he did not rush forward to administer heroic remedies to exterminate the cankers, his unfailing administrative test, and his admirable genius committed the task of educational reform to a body of experts. This body was designated the Universities' Commission.

This Commission was appointed to enquire into the condition and prospects of the Universities established in British India; to consider and report upon any proposals which have been or may be made for improving their constitution and working and to recommend to the Governor-General in council such measures as may tend to elevate the standard of teaching, and to promote the advancement of learning.

The Commissioners with Sir J. Raleigh as President embarked upon a long career of investigation and enquiry in the different presidencies and provinces of India. Suitable provisions were also made to secure the co-operation of local members with a view to touch the pulse of local opinion. Persons of light and

leading, and educational experts were freely invited to declare their views and to enlighten the members of the Commission with their suggestion on the thorny topic. No attempt was made to thrust upon the people a drastic measure planned and matured in secrecy. The vast and voluminous evidence recorded with untiring energy, the free and unfettered expression of Local governments solicited on the Bill, and lastly the storm of debates in the Imperial council signifies the noble and dignified fulfilment of the high mission of the Universities' Commission.

It seems to be entirely unnecessary to deal with all the phases which cover the chequered career of the Bill from its inception to its termination, as the history of the Bill, is fresh and green in the memory of every citizen of the British Empire. In accordance with the recommendations of the Commission (Dr. Goroo Dass Banerjee expressed his dissentient views in a Note of Dissent) the Universities Bill was drawn up. From the chrysalis state of a Bill it has developed into a Statutory law, having had to run the gauntlet of criticism at the hand of the non-official members, who made a determined stand against it.

The dawn of a new day has at last burst upon the intellectual horizon of the country. We all largely and expectantly look forward to the bright and glowing future of great promise and golden hopes. The introduction of this Bill has unfortunately divided the public, some hailing it as a measure fraught with potentialities for immense good, and others, regard it as a reactionary piece of legislation which will put the hands back in the clock of progress. But when the healing hand of time will have poured the balm upon the wounds caused by the free-lance of warring opinions, when the tempests and storms of agitation will have subsided into stillness, and when passions, prejudices and party feeling will have receded into the limbo of the forgotten past, posterity will endorse its verdict, which now finds a feeble utterance.

APPENDIX.

EXTRACTS FROM BLUE BOOK OF THE HOME DEPARTMENT.

(Judicial and administrative 1902.)

X.

EDUCATION.

General Results.

A comparison of the number under instruction in public and private institutions in 1901-02, and the two preceding years indicates an advance to the highest numbers yet reached, following a set back in the previous years.

			1899-1900.	1900-1901.	1901-1902.
Males	...	...	4,037,821	3,958,663	4,084,130
Females	...	...	425,914	429,645	446,282
*	*	*	*	*	*

For general purposes it is, however, more useful to note the rate of progress in the last years of a series with the immediately preceding year.

The numbers have risen in the decade from 3,374,957 to 4,530,411, an increase of 535,455 being at the rate of ten per cent. The increase in male scholars was in the rate of 13.1 per cent, but most of the progress was in the first half of the decade for in the second half there was but little progress, the increase being only 3 per cent. The females increased by 22.48 per cent. The relative numbers of males and females were:—

			1892-1893.	1896-1897.	1901-1902.
Males	...	...	3,610,591	3,964,239	4,084,130
Females	...	...	364,367	403,317	446,282

The proportion of females to males receiving instruction being in the proportion of about one to nine, * * * *

The classification of educational institutions as regards the description of education imparted, and the number of students in each class of institution, is as follows.

University Education

<i>Arts Colleges</i>			1892-1893	1901-1902.
English	...	...	12,363	17,430
Oriental	...	...	525	503

Professional Colleges

Law	...	...	1,915	4,767
Medicine	...	...	811	1,466
Engineering	...	...	519	865
Teaching	...	...	507	190
Agriculture	...	...	42	90

School Education (General)

<i>Secondary Schools</i>	...	176,001	254,690
High school	...	146,478	176,628
Middle English school	...	165,782	129,324
Middle Vernacular school		2,890,824	3,271,379

Primary Schools

Of the boys and girls in Secondary and primary schools, amounting in number to 3,832,021, the great majority as many as 85.4 per cent are to be found in the primary schools.

University Education.

In university education the colleges, which train for the obtainment of degrees in arts contain three and a third times the number of students who are attracted to the colleges which train for special degrees. In these latter the students going through the course for a degree in law greatly outnumber the students trying for the attainment of degree in all other special courses combined.

The number of university graduates was :—

			1892-1893.	1901-1902.
Arts	...	...	1,060	1,588
Law	...	...	297	582
Medicine	...	...	7	2
Engineering	...	...	9	12
Oriental languages and literature	...	...	4	2

In the last decennial period the Universities have passed out 14,439 graduates in arts, and 3,603 in law, a total of 18,042 graduates in these two subjects.

In the oriental languages and literature a degree conferred only by the Punjab University there have been only 33 graduates in the ten years, while the same University conferred in the period 1,142 degrees in arts. The University of Madras has passed out 4,637

and the University of Calcutta 4,605 graduates in arts in this period, the two together accounting for about two-thirds of the M. As and B. A. of India.

During the same period, 50,190 under-graduates were enrolled, of whom 39,891 were entered for the Arts course. It seems therefore that in these ten years but 36·4 per cent of the under-graduates attained to the possession of degrees. (XX—XXII.)

ROMESH CHUNDER BOSE, M.A.,B.L.

TOWN-LIFE.

No, I do not want of it any more. I have had enough of it.

2. I was happy in my country home. I am sick of this town life: And I want no more of it.

3. Shall I tell you why?

4. I am one of the many who migrated from the country. It was in my case the doing of my big, blustering brother. He gave a charming account of town life, and I left home to live it. He was a member of your town council, and I a simple country gentleman. Naturally, I gave him credit for superior wisdom, æsthetic perception and correct knowledge.

5. I find to my utter regret, that he was a fraud—an egregious fraud. The picture he depicted was a delusion and a snare,—from top to bottom. And I say this deliberately after giving your town a trial of twenty long years.

6. First and foremost, he said that your town had superior sanitation. I find it a place of plague and pestilence. To my mind, the malaria of the country with all its spleen and liver has lesser horror about it than this plague of yours. My experience confirms my sentiment. Out of my six relatives with enlarged spleen and augmented liver, four have survived in the country. Two died, but they died a natural death. Theirs was a slow decay of the vital powers which failed step by step to respond to treatment.

§ treatment there was, albeit there were no doctors with distress-long degrees and diplomas such as yours. And the cost of r treatment was but a trifle. But here? Why, six of my people have succumbed—two to plague, one to small pox, one to olera, one to appendicitis and one more, the last—to no disease at but to a tram-accident. There was in their case, no treatment e name. In each and every case, the doctors said there treatment. And yet I paid them fees sufficient to satisfy a e and all of them—what

seemed to me, violent deaths. I will say nothing about the worry and the trouble, the *dick* and the bother, the difficulty and the expense, to say nothing of the shock one had to one's nerves and feelings, in the disposal of the dead. That covers a sore spot in my heart and I shall carry it to my grave. There is, I need hardly tell you, none of all this in the country. Nor shall I describe the false report of plague in the case of cholera and the consequent harassment by the plague subordinates. I do not believe in the published plague diaries. They have no system of checking genuine plague deaths or discriminating them from the rest. I say this from my own personal knowledge. Your titled M.D.'s in the town are, in my experience, no better than the plain, unsophisticated medicoes of my country-place. But that is quite another story.

7. Secondly, my brother's seductive account of the cleanliness of your town was, I grieve to find, an absolute myth. He spoke of spacious, polished, stone-paved foot-paths shaded by the cool and fragrant arches of flowering bushes. But those I have to use are narrow, scabrous, rugged, hot, open, and sloppy, without a vestige of vegetation about them. They resemble the residual-bottoms of abandoned brick-kilns. I have had no less than a dozen ankle-sprains and a hundred chipped toes in my walks during the last ten years. And my little ones have fared worse. Rosie, my eldest girl bears a scar on her cheek, as the result of a fall in her sixth year. She tripped against a rubbish heap of street-sweepings and fell. These the conservancy care-taker in his tenderness for rate-payers' feelings, had deposited for months close to my street-door. As she fell, the projecting points of the foot-path grit pierced her fair right cheek close to the upper lip and brought on inflammation and suppuration. I had to send for two surgeons, one after another, to extract the broken pieces that lay inside the wound. They put her under chloroform, extracted the dirty bits and pronounced her infected with the germs of erysipelas, after a close, careful, prolonged, personal investigation under the mirror of a microscope. Necessarily their bill was long—a matter of four hundred Rupees. Josie, the second girl has fared somewhat better, but even she walks lame, although the broken glass which penetrated the soft tissue of her dainty little right foot cutting clean through her dainty shoe, was extracted five years ago. I never see any of the boys but they all bear marks of this

neglect of those who levy high rates from me for keeping the roads in order. Of course my anger knew no bounds at each and every such occurrence. And I swore I would go for them. But my lawyer forbade. He said that I was nobody here though I might be the lord of my country-place, and that the conservancy men were somebodies. He would not advise a criminal prosecution or a civil suit either. He would foretell a failure in both and subsequent harassment without number. In fact he went so far as to hint that Magistrates and Judges would care more for Municipal prestige than for the limbs of my fair daughters! I was beside myself with rage, I assure you. But my persistence finally brought the retort that if I must go to jail on a counter charge of bringing false and frivolous complaints, such as they were bound to find my cases to be, notwithstanding all the ocular, respectable and *expert* testimony I could cite, why then, he for one, would have nothing to do with me. This quieted me for the time being. For I knew him to be exceptionally honest in advice though exacting in fees. I reopened the question again and again but he swerved not. He said the system was in fault—not the men. Town Magistrates and Small Cause Court judges, he repeated, were but small fry compared to the big man of the Corporation. If the big man backed the little conservancy men—and he was of opinion that for the sake of prestige he was bound to lend them his support—I would be disgraced and ruined. I did consult other lawyers on the sly; but, although they would advise litigation (with an eye perhaps to their own pocket), one and all of them doubted if the result would be in my favour. And yet they all agreed that mine was a very strong case.

8. These mishaps were but mere flea-bites compared to the dreadful disaster that befell my aunt Florie one day on her way back from the market. She had purchased a brandnew phaeton from Dykes and paid quite a small fortune for it. Her pair of black Arabs not only delighted her heart and the eyes of all Park-goers but excited the envy of a good many of her own sex. It was late and nearer nine than eight o'clock. As she neared home, the horses increased their pace; and while about to take a turn into a side-street, the man found to his horror that a big pit had been dug across by Municipal workmen. There was no turning back. As the man could pull up, down went one horse, crash fell the coachy off the dicky box, 10 yards

from the pit. My aunt screamed: the ayce cried: the horses struggled and kicked; the one not in the pit kicked itself loose of its traces which broke. A number of spectators assembled. The municipal overseer grinned, enjoying the fun. The Babus giggled, chuckling at a lady's misfortune, and the by-standers shouted help. But no help came. My poor aunt, bruised and bleeding, fainted clean away. And yet the horse kicked on and on until its very strength failed. But by then that fashionable phaeton of aunt Florie was a mass of ruins. The shafts had flown into pieces, the front-gear fallen away in fragments, the wheels had been broken out of shape and even the springs had been shifted from their position. The paint was of course all gone and with it my aunt's crest—a unique one for the Red Road. A number of double-collared, cheap-tied, Chandney-clothed gentlemen of Imperial Anglo-Indian domicile essayed to help the horse out of its position and my aunt out of her peril. But they failed, and the Babus and the municipal workmen laughed at their discomfiture all the more merrily. Then came an old European friend of my aunt's—the genuine article and not the sham one that passes muster for it in this town of yours. Quick as lightning he cut off the traces of the horse with his pocket-knife: and with an agility uncommon to athletic country youth, he was the next moment pulling my unconscious aunt out of the carriage and carrying her in his arms into his own *ticca ghary*. When about to drive off, some one told him of the injured coachman who lay where he had fallen, motionless but breathing. To pick up this man was the work of a moment and the next he drove top speed to the hospital. There my aunt lay for six weeks unable to stir out of bed. The coachman died in two days.

My aunt has forgotten to tell me who the maker of her harness was, and my description of the accident need not therefore cause any flutter in the firms of Monteith or Watts, Cutbberison or Oottle.

Did my aunt complain or sue? No; the same considerations had, she told me, deterred her as had deterred me before. And yet my aunt was, believe me, a wealthy lady without encumbrances. She has had several new turn-outs since from Dykes and Stewart and has regularly paid a large additional wheel tax to the Corporation. She does not believe in revengeful attacks on wrong. In the true Christian spirit, she not only forgives her injuries and

forgives her enemies but actually delights in doing them good. As an instance of this, she paid the other day a decent bonus to the tramway coolies who helped to fetch her a ticca-gharry when the rubber-tyres of her landau fell out by getting into the rut of the tramway track. Not that she does not know that it is the tramways people that cause the awful wear and tear to rubber-tyres and carriage-wheels which necessitates their perpetual renewal. She knows that and more. She has often told me that the tramways are a mixed blessing to the poor and a curse to the rich. The tragic deaths, the risk to life, the nervous tension in mounting trams, the neglect and inattention to passengers, the lack of all rule and discipline, the dead level fares and consequent promiscuous travelling do, in her opinion, far outweigh the advantages of cheapness and speed even for the poor. As the only persons benefitted are the shareholders and the corporation, she maintains, with good reason, that the tax on carriages and bicycles should, in the case of all but the dividend winners and the Municipal councillors, be reduced by the amount of their profit. She is however too discreet to air her views before the public. And I—well, I am no member of the Chamber of Commerce and my representation will, I know, be of no avail. So I have hitherto kept my own counsel and my aunt's too, deep in the recesses of my heart. Now however, that my aunt has left the country and I mean to leave for the country for good, I have unbosomed myself. It may be there are others like her and me and they may follow our example.

9. But I digress. My brother had pithily painted the Calcutta water-works as the finest gift to man among divine blessings. Water in house-tops, water in the third floor, water in the second and first, and water everywhere else at one's elbow—such was his account. And such water! Pure as snow, bright as light, transparent as glass, and clear as crystal. A daily dose of a dozen drachms of it was enough to kill all human parasites, visible and invisible. Earth-worms had vanished, centipedes had died, scorpions had disappeared, mosquitoes had fled and microbes had perished—on its introduction into the town. Snakes and reptiles had been swept off the ground by the free flow of this pure inorganic water. Such organisms fly on impure water containing organic matter. Thus had died—this precious, oratorical brother of mine. And I—
 I was—I swallowed all this in the simple innocence of

my confiding nature. I built a four-storied house in your town, laid water-pipes and taps in all the floors, and pitched my kitchen on the topmost flat to prevent smoke in my own and in neighbours' houses. And I have been served right for all my troubles and expense. Not a drop of water have I ever found in any of the taps but the lowest. And even in these have I found little mice, centipedes and snakes during the rains. Instead of a limpid crystal, the water has been occasionally turbid if not yellow. Instead of its being a germ-killing medium, it has been—such is my luck—the medium for contamination in the plague, cholera and small-pox cases in my household. And the mosquitoes of my house have multiplied many-fold through the stagnation of water in the higher taps through want of pressure. Nor is this all. In a large household like mine, the two taps on the groundfloor have yielded but a tenth of my requirements. I have had to requisition the services of four water-men—two for the kitchen and two for the baths—and half a dozen *bhisties* for fetching water from the hydrants in the streets. The rush to these hydrants has often been so great that my cooking has been delayed and I have had to disappoint friends and patrons at meetings and gatherings. On one occasion my absence at a shareholders' meeting cost me dear. Plague was virulent in the business quarters at the time and I could not of course run the risk of contagion by going there with an empty stomach. I waited for my breakfast. It was prepared—but too late for the meeting. And I lost a handsome sum of money. All this, mind you, through Municipal bungling. But your lawyers here are—not too dense—but too acute to demonstrate this connection in a Court of law.

10. The street-watering of the town over which my brother had waxed wonderfully eloquent is, in my quarter, a thing of the past. When there were water-carts, they used occasionally to ply along my street and wet the ground. They never watered it sufficiently to cool the atmosphere. On the contrary, they put just enough water to cause a redoubled radiation of heat. But in any case, they used to lay the dust. Now they are in for pipes and so all watering has stopped. The stifling heat and the blinding dust of the present season are scourges enough in all conscience. When you add to these the evening hurricanes of the unswept street-refuse of the day—they have discontinued the old town conservancy carts

in my part of the town—you need not wonder at the high mortality exhibited in the weekly returns.

11. Under instructions from my brother and the advice of an Engineer expert, I got an European firm of established reputation to do the work of all unfiltered water-supply connections of my house. They would, I was told, do the work fast and well, secure necessary sanction, supply strong and serviceable gear, and save me the services of several sweepers. I paid them their bill—an unexpectedly long one. No one could scan it properly—not even my engineer-friend—the items charged and the words used being more or less unintelligible. They gave me a guarantee for three years. But barely three days had elapsed when the tanks overflowed and the floors were flooded. They came and repaired the mischief. It was nothing, and such things always happened, said they. But before three months were over, I found water leaking through the pipes on my second floor and dribbling through the roof below down into the baths of the first floor. Back they came and dug through my Minton tile-flooring and refixed the leaky connection. At the end of six months, the tanks began to choke and the drains to block up. The solid deposit of mud was cleared and the drain-obstruction removed. I had to pay separately for the work. And a like occurrence has taken place every three months since. But this is not all. I have had to change the tanks which crumbled away every three years. And for days together every two and three months, there has not been a drop of water in the tanks and I have had to increase my sweeper and *bhisti*-staff in consequence. The Municipal people do not, in my experience, respond readily to representations regarding stoppage of water-supply, filtered or unfiltered.

12. To add to my troubles the authorities have allowed a soorkee mill and a smelling furnace to be started within an ace of my residential house, regardless of rules and regulations. The soorkee dust and the black smoke have soiled and blackened my house, paint, furniture, clothing and wearing apparel. The noise has generated vertigo in Bertie, headache in Mott, neurasthenia in Neddie, and deafness in Dizzie, besides disturbing my own work and the studies of the student members of my family. The mill-carts have blocked the street for hours of the day and it has been difficult for me to get out

for a drive. The bullocks and buffaloes of the mill have soiled the roads and polluted the air. And the mill-hands have made night hideous with their cries, and we have passed many a sleepless night during the Dewali when their malicious music with drum and tambourin has drowned their gambling bets and given the Policeman an excellent excuse for his absence.

13. My troubles do not end here. Every day when going out I notice that the public road is used as stabling. If you come my way any day, I can show you half a dozen horses and cattle tied to posts planted on the roadway, for being groomed and fed. I have protested and they have pointed to the *Parawalla* and the Municipal Babu. Dhobies expose their dirty loads with impunity, and shopkeepers seldom show scruples in using the street as their private drain. And the danger to life and limb is accentuated by the street-lamps often going out of order and not working at all.

Remember that my locality is inhabited by Europeans. If all this happen here, I wonder what happens elsewhere.

14. My woful tale of your awful town is not even yet at its end. I buy here with my hard-earned money oleo-margarine for butter, hog's lard for ghee, *gunji* for mustard oil, bran-dust for flour, chalk-solution for milk, dry bones for fat meat, heat-coloured, tasteless, insipid, berry and legume for tree-ripe fruit, burnt-cork decoction for wine, and poisonous aldehyde for genuine whisky. And all this, mind you, notwithstanding the vaunted vigilance of your highly-paid Health Officer and his food-inspecting staff! Can he or his analyst say, with his hand upon his heart, that anything I buy of food or drink in this town is pure and genuine?

15. A few months ago, a relative of mine wanted to make a small addition and a little alteration to his house. I cannot adequately describe the poor fellow's sufferings for this simple resolve. A plan had to be made and sanctioned, not of the addition and alteration proposed but of the whole house. And this cost him money—legitimate and otherwise. Then he had to submit, to his great distress, to endless visits from Municipal underlings some of whom bullied and threatened him for alleged deviation from the sanctioned plan. He sought the help—~~at first~~ of the higher officials, on whom he had to dance attendance for days, but in vain. He had next to attend the Municipal

magistracy and spend a good deal there for his case. And last he took the matter up to the High Court where he has just won his case.

And he tells me that for an alteration which cost him five hundred Rupees only, he has had to spend five thousand in litigation. The Municipal men plead *bona fides* and he has no cause of action against them for damages!!

16 But enough. I think I have said enough to let you know and see plainly why I have decided to damn your town and quit it.

17. I do not, let me tell you, accuse my brother of wilful misrepresentation or deliberate deception. He saw the town as one sees it in the season near Government House and the Eden Gardens, in Chowringhee and Middleton Row. He was too high to descend into Barabazar or Baitakkhana, Bowbazar or Beparitola, Banstala or Baduibagan, Champatola or Chootarpara, Chandney or Chatawalgully, Keranibagan or Kumartuli, Terittabazar or Taltala, Machuabazar or Mehndibagan, Neragirja or Nebutala, Hatkhola or Haripara, Choonapukur or Chinapara, Kopalitola or Kalitola. How I wish I could bring him down with me one day and show him round the localities where our domestic servants congregate, almost within a stone's throw of our own residential houses. Behind the tall, handsome well-ventilated houses that adorn your main streets lie dense masses of humanity, packed like sardines, in low lamp, dark, undrained and unventilated hovels where cattle, pigs, goats, men, women and children are all huddled up together—undistinguished and indistinguishable. My Lord Mayor has never visited these, I bet. The Health Officer, his right hand man, has—on paper I suspect. It is incredible—I had said impossible—to be there and not to report their mending or ending. And yet, for twenty long years have I seen them—unchanged and unchanging except in their surroundings. A hot, fuming, reeking mass of refuse emitting a foetid, foul, stink assails your olfactory nerves at every turn. Rotting rags and rotten rats, stable-straw and street-sweepings, drain-cleanings and animal filth all vie with each other in generating destructive effluvia all round. Need any surprise that children growing amidst them should be sickly and of a stunted growth? Need you wonder that a man should carry a myriad microbes in his clothes

sleepless night in his hovel? Ornament Chowringhee as best you may; adorn Government Place as highly as you can; have the best doctors available, use disinfectants the most costly, keep your own house, furniture, and clothing as scrupulously clean as it is possible to do; still you cannot, rest assured, avoid the risk of contagion of cholera and measles, tetanus and typhus pox and plague, so long as your servants continue to reside in foul, insanitary, dwellings amid filthy surroundings

18. When I think of my country-house, its refreshing breeze, wooded enclosures, ornamental orchards, luscious fruits, grassy turfs, shady avenues, expansive meadows, enormous tanks, beautiful hills and crystalline rivulets—and compare its clean and cool drives, quiet, secluded groves, soft verdant pastures, with the dirty, bare, exposed, hard, stony buildings and roads of your town, with its dreadful dust, its grievous glare, its scarce vegetation and its filthy food-stuffs, its fearful load of microbes under and above ground, and its numerous other insufferable, indelicate, and indescribable inconveniences, I clearly perceive that I have left a perfect palace in Elysium for a pestilential place in Pandemonium.

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THE
NATIONAL MAGAZINE
NEW SERIES.

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JAMES WILSON. •

It has often been remarked that the Indian press has a very short memory. The remark is certainly true, and there is abundant cause for it. Few Indian papers, Native or Anglo-Indian, are under the management of a single Editor for even half a dozen years. The result of this can easily be imagined. Editors, again, in India have not always a large body of contributors. They have to do their papers themselves. With little knowledge of the past, they discuss the questions of the day. No wonder, therefore, that when Mr. James Wilson was gathered to the great majority, no obituary notice, worth the name, of that sincere friend of India, appeared in any Indian paper. An illustrated Calcutta journal, *viz., the Empress*, had honoured Mr. Wilson during his life, with a portrait and letter-press above the average. The death, however, of the veteran editor was scarcely noticed by his brethren of the quill in India. This has not been the fate of Mr. Wilson alone. When the Revd. Lal Bihary De left this world, no paper, native or Anglo-Indian, honoured him with an obituary notice, till *Ries and Rayyet* rescued the Indian press from obloquy by coming out with a fair notice of the deceased's life-work. Sir W. W. Hunter also, the greatest of literary Anglo-Indians, had little honour done to him in India after his death. Without multiplying examples, which seems to be an idle task, we desire to give a short account of Mr. James Wilson's life. In the absence of materials we are obliged to quote largely from one of the Sheffield papers. The following appeared in the paper in question, immediately after Mr. Wilson's death.

"We regret to announce the death of Mr. James Wilson, of 14, Rutland Park, Sheffield. Early in life he was engaged in the cutlery business. This took him on one occasion to India. Some years later he forsook this line of life for journalism, ultimately becoming proprietor and editor of the "Indian Daily News," published in Calcutta. A keen student of public affairs, he rapidly acquired an intimate knowledge of questions affecting the welfare of the people among whom he had settled. His position as a journalist afforded him opportunities of getting behind the scenes to an extent denied to most people, and by the agency of his journal, which he conducted with marked ability, he was able in no small degree to form and guide public opinion in what he regarded as wise directions. In the year 1893—he was then well advanced in life—he disposed of his paper and returned to this country, settling in his native city, Sheffield, where he soon became once more very well known and highly respected. Naturally, he continued to take the liveliest interest in the affairs of our great Indian Dependency, and in social and literary circles was rightly regarded as an authority worth listening to when any question of Indian administration was under discussion. In him the Sheffield Literary and Philosophical Society had an ardent admirer and warm supporter. He was a member of the Council of the Society, and for a time shared its secretarial duties along with the late Mr. Edward Birks. Among the charitable institutions of the city, the Blind Institute especially appealed to his sympathies. At intervals for a long time past, articles from his pen on a variety of subjects have appeared in these columns. With a predilection not uncommon with men advanced in years, he delighted in reviving recollections of the past, and from the records of events forgotten by the present generation, he built up articles dealing with the earlier government of Sheffield, which have been widely read."

Reverting to the subject another day, the same journal said.—

"To a large circle of friends and acquaintances, deep regret will be caused by news of the death Mr. James Wilson, of Stonehurst, Rutland Park, Sheffield. The deceased gentleman passed away after a lingering illness, brought on by an internal and painful complaint. Thus, at the age of 77, has ended a career notable in many respects, full of self-sacrificing, public-spirited usefulness.

"Mr. James Wilson belonged to an old Yorkshire and Sheffield

family, and had as a brother one who figured largely in the public life of the city—the late Mr. John Wilson, grinder, politician, Guardian-member of the City Council, and the first Labour man elevated to the local magisterial bench. The two brothers seem to have inherited, side by side with unusual abilities, that strong independence of character which ere their careers had closed made them both famous in their respective spheres. Educational facilities were comparatively restricted seventy years since, but the two Wilsons supplemented the knowledge obtained in their school days with private study, and availed themselves in youth and early manhood of the instruction to be had at the old Mechanics' Institute. This application had a remarkable effect in the shaping of their subsequent careers. Actuated by ambition commensurate with the ability they undoubtedly possessed, their destinies, dependent on their own exertions, were in safe keeping. Both found their first employment, on leaving school, with Joseph Rodgers and Sons, of Norfolk street. With this firm Mr. John Wilson remained engaged for many years, and the success of his life in Sheffield, both in business and in public affairs, needs no mention here; suffice it to say that he was for half a century one of the best-known figures in the city.

“Comparatively early in life, Mr. James Wilson, having left Rodgers and Sons, migrated to India, and started in business on his own account. But he had always a penchant for literary work, and soon found scope for his pen in the Indian Press. Before leaving England he had cultivated the journalistic bent so successfully as to contribute articles to more than one well-known Yorkshire newspaper. He did special work for a Delhi paper on arrival in the East, and after occupying a series of professional journalistic posts he became editor of the “Indian Daily News,” a Calcutta journal, then in a languishing condition, but soon to make its influence felt under the guidance of the erstwhile cutlery manufacturer.

“From the outset of his professional newspaper career, the deceased warmly associated himself with the cause of the Indian native. This advocacy led to trouble, but difficulties only tended to spur on one who, with faith in the justice of his purpose, was determined to call a spade a spade, and expose wrong. Becoming sole proprietor of his paper as well as editor, Mr. Wilson had a

freer hand, and he used it with effect. For exposing what he considered corruption on the part of British officials he was prosecuted for libel. The case had reference to the treatment of natives. The trial was a long one, but though pleading his own case, and having arrayed against him the most eminent Indian Counsel of the day, the editor came off victorious, and secured a verdict in his favour. This he regarded as the most notable incident of his journalistic career.

"The inevitable result of the action, ~~being~~ in mind what had brought it about, was to make the deceased a hero in the eyes of the educated native readers of his paper. That he retained the valued esteem thus gained, there was abundance of evidence to show throughout his Calcutta career. From many native rulers and men of influence throughout the Indian Empire he received tokens of affectionate regard, and these became not the least treasured of his possessions. But the appreciation did not come solely from the native. Honesty of purpose and singleness of aim, quickly began to appear to even higher quarters. Mr. Wilson soon won the confidence of the Queen's representatives in the East. Amongst them might be mentioned Lord Ripon and Lord Dufferin. From the latter he received a kindly letter a short time before that famous Viceroy's death at his Irish seat. Deceased had the entree of the Government House, Calcutta, for many years; his advice was valued and frequently sought in complications which referred to the claims and status of the natives.

"Mr. Wilson's position as a politician and journalist was that of a philosophical Radical. The "Indian Daily News" prospered under his rule, and about 15 years since he returned to England with the intention, as his many Sheffield friends hoped, of permanently retiring. It was then that a number of influential citizens suggested his standing for Parliament in opposition to the late Sir Ellis Ashmead Bartlett in the Ecclesal Division. Business matters, however, made other claims. The deceased returned to India, and not till about six years since did he finally give up work and settle down in Sheffield, building a home for himself in Rutland Park. Deceased was a Unitarian, and was connected with Upper Chapel. He leaves a widow, four sons, and a daughter. The eldest son, Mr. James Wilson, is a journalist in London; the second son, Laurence, is now head of the firm of Carruthers and Co., solicitors

of Calcutta; and another son, Mr. Horace Wilson, is well known in Sheffield as a rising young barrister.

"From time to time the Press of India has borne eloquent testimony to the public service and sterling independence of thought displayed by one who was affectionately and respectfully referred to as "the veteran editor." In a biographical notice, 'The Empress,' a prominent Calcutta illustrated journal, thus dealt with the deceased's career when his reputation had reached its zenith:—

"Mr. James Wilson is a descendent of an old Yorkshire family, said to be connected with that of Sir Martin Frobisher, the navigator and adventurer, and this strain might well account for the independence of character which he has always displayed. He was educated under a very able Nonconformist minister, along with a number of young men who have since taken part in public life, among them Dr. Moorhouse, Bishop of Manchester. Both were in their families connected with the industries of the North of England; and both manifested tendencies in other directions, the latter inclining to the Church, the former to journalism. He was scarcely out of his teens when he was a regular contributor to the newspaper press, and in the early days of the firm that is now Messrs. Cassell and Co., the publishers, he gained several prizes that were offered by the founder of the house. In 1862 he was specially engaged by Sir Edward Baines, of the 'Leeds Mercury,' to report the Great Exhibition of that year, a duty which he also performed for another Yorkshire paper, and received high commendation from both. In the following year he came to India, and his first literary work in this country was to write a report for the then celebrated 'Delhi Gazette' of the first agricultural exhibition of India, which was held in the grounds of Belvedere, and was opened by Sir John Lawrence, shortly after he had become Viceroy of India. Shortly afterwards the 'Indian Daily News' was started. It seemed fairly successful, but not conspicuously so. Mr. Wilson was a frequent contributor to its columns, and on municipal matters especially was something like an authority, though not always recognised. He had much to do with advocating the best work the municipality ever did, namely, the water-works. He combatted the strong prejudices of the natives against them, and by argument and raillery broke down some of the strong conservative feeling that would have prevented that inestimable

boon of Calcutta. Matters, however, were tending rapidly towards insolvency or liquidation, when the whole concern was bought by the late Mr. Charles Lazarus, who took a lively interest in the paper, and entertaining a warm feeling of friendship for Mr. Wilson, and a shrewd perception of his ability, asked him to take charge of it. This he did, and he re-organised the staff, and soon brought the paper into a position of prosperity. After a short time Mr. J. A. Parker joined him, and the two purchased the property, and shortly afterwards bought the copyright of the 'Bengal Hurkara.'

"In these early days of the paper Mr. Wilson rendered important public services. One of the first was to bring to the notice of the Secretary of State, Lord Cranborne (Salisbury), the state of Orissa. The Board of Revenue were blind to the serious state of the people, sometimes denying that a famine existed, and alternating this with old laws of 'political economy' and 'the laws of supply and demand.' Mr. Wilson had some photographs taken of the famine-stricken and sent to Lord Cranborne, who acknowledged the communication by return mail, with a severe despatch to the Government. This was the beginning of a correspondence with his Lordship, which was not without results on several matters of policy affecting this country. In an interview with his Lordship, Mr. Wilson induced him to order the release of the alleged Wahabee, poor old Amir Khan, who was almost persecuted to death, and was released only to be killed in the street by an accident. The incident may not be worth mention, except, perhaps, for the illustration it affords of the world's gratitude. For this piece of service to the old man and his community, not even thanks were accorded. Another public service Mr. Wilson did on taking charge of the paper was this: he saw that the Government were throwing a large amount of money away in selling their opium through an external agency. He suggested that Government should sell their own opium. He hammered at this until it was done, and the saving of commission resulting on, probably, two hundred millions of opium was duly and gratefully recognised by the Government, and it is strange that, notwithstanding this service, opium advertisements were refused to the paper which had saved them many thousands of pounds. The paper continued to flourish under the partnership, and became notable for the attention paid to

the municipal affairs of Calcutta. Sir William Grey nominated Mr. Wilson a Justice of the Peace, which gave him a seat in the Calcutta Corporation. With a few others, he took a very independent position in that body ; and it might have been well for the progress of municipal work in the city if their knowledge and experience had been more largely utilised. But there was no room for independence. Criticism was barely tolerated, and on one occasion Mr. Wilson was grossly insulted in the Opera House by an engineer, who was fined Rs. 200 by the then magistrate of the Southern Division.

“ During these many years it was scarcely to be expected that the editor of a popular journal would escape actions for defamation. Many more were threatened than carried out ; and, on the whole, the paper was moderately conducted, though never wanting in strength and honesty of expression. After a number of years in partnership, Mr. Wilson became sole proprietor of the paper, and ever since conducted it on thoroughly independent lines. Having the sole charge of the paper on his hands, he practically retired from the municipality, the elective system involving a change in the constitution of the Corporation. He was pressed by several constituencies to become a candidate, and in the Hastings Ward, where he resided, he had the pledged support of every elector. He declined to re-enter the Corporation, but, on the strong representation of a number of native gentlemen, he consented to accept office if elected to a seat, owing to a vacancy from a duplicate election. He was returned by a considerable majority, but the Chairman cancelled sufficient votes to enable him to declare the other candidate elected. This led to some comments in the paper, questioning the honesty of the return. Sir Stuart Hogg, the Chairman, prosecuted Mr. Wilson for defamation ; and after a trial in the High Court, lasting four days in which Mr. Wilson very ably defended himself, he was acquitted to the great satisfaction of the public. The citizens of Calcutta owe much to the efforts of Mr. Wilson in securing to the ratepayers a freedom in election which had not before been allowed to them. He did not again enter the municipal arena ; and though his retirement from active participation in the administration of the affairs of the city was, in one sense, a withdrawal from public life, yet in a small community like that of Calcutta the personality of an editor cannot well be hidden.

"During his long editorial career, Mr. Wilson undoubtedly wrote articles which, perhaps, did not meet with that entire sympathetic approval at the hands of his readers which he might have expected ; but it is quite certain that what was written, whether approved of or not, was honestly written, and thoroughly believed in by him to be right. Mr. Wilson had, moreover, never been afraid to confess a mistake—not that he had made many—but it is characteristic of the man that he was ever ready to make the 'amende honorable' where necessary. He was the essence of straightforwardness, and this element shone out conspicuously in the conduct of the paper with which his name has been so long identified. Friends or foes had alike been told their faults. He had always been a loyal supporter of the Government, but, nevertheless, he never failed to 'snap' at them when necessity required it, and he was fearless in pointing out 'crooked ways' and reckless expenditure. He thoroughly appreciated the value of an active life, and that exercise was essentially necessary to one's well-being. His name is still well and kindly remembered in Hastings, where he and his good wife resided for many years, gaining the esteem of all who knew them. While there, some of Mr. Wilson's admirers, who deemed his public services worthy of recognition, presented him with a very massive silver inkstand, accompanied by an address, which expressed in suitable terms the gratitude they felt for his unselfish devotion to their interests as ratepayers, and for the warm interest he invariably took in all matters, whether social or public. Although he has ceased taking an active part in any public institution, Mr. Wilson had never been wanting in the support of any measure tending to the public welfare or of special interest to the city. In doing this, he knew no party, though in politics tending to broad Liberalism, and in religion a wide catholic Christianity. He is somewhat intolerant of cant and bigotry, while admitting the utmost latitude in the expression of opinion on all subjects that might fairly claim a right of expression.'"

Here is an anecdote issued from the same Sheffield paper that he read with interest.

people remember (writes a correspondent) the Exhibition
man's work in Sheffield, which the late Prince Albert
the Master-Cuttership of Colonel J. E. Bingham)

came to open. The death of Mr. James Wilson, formerly of Calcutta, as recorded in your columns, recalled to my mind an incident of that Exhibition which is not generally known. Mr. Wilson was one of the judges. In the Cutlers' Hall, where the Exhibition was held, exception was taken to Mr. Wilson's appointment. 'What does he know about Cutlery?' asked one well-known craftsman. Mr. Wilson, overhearing the remark, picked up a pen-knife, and, turning to the little group of grumblers, retorted, with some warmth, 'Could any of you make that knife from blade to haft—finish it as it stands?' The answer, as he expected, was that none of them could do so. 'Then I could,' said Mr. Wilson, 'and if you dispute my word, am prepared to do it.' That's what I know about cutlery,' and he looked round, expecting to be challenged. But there was no challenge. The objectors left. They did not know then, but they learned soon afterwards that Mr. Wilson had 'graduated' at Rodgers'. How many craftsmen nowadays could make a knife from start to finish?"

The prosecution of Mr. Wilson for defamation was a memorable event in the history of Calcutta. It is still remembered by many of the citizens. The manner in which Mr. Wilson conducted his defence was most remarkable. He cross-examined Sir Stuart Hogg most ably. There was an earnestness in his manner which obtained him the sympathy of the audience. Fixing on Sir Stuart the look of Jove when he grasps the thunder, he sometimes said,—“Sir Stuart Hogg, God above, the court below, and these gentlemen present, would you swear to this?” The writer was present at the trial. He distinctly remembers the sorry figure which the prosecutor made in the witness-box. It is no exaggeration to say that Sir Stuart was seen to cower under the glance of the cross-examining accused. The speech which Mr. Wilson made was an eloquent one. His observations were listened to by the Jury with attention, and when the verdict of “Not Guilty” was returned, there was a shout in court which it was difficult for the Judge to silence. A few days after the trial, Mr. Wilson told the present writer that a particular cell had been ordered to be fitted up in the Alipore Jail. It was called “Wilson's cell,” so called by him and some others about the result of the trial. Mr. Wilson's temper was amiable.

come out, Mr. Wilson sought the friendship Dr. Sambhu Chandra Mukerjee, whom he called "the philosophical statesman presiding over *Reis and Rayyet*." Dr. Mukerjee had great respect for Mr. Wilson's abilities and character. Mr. Wilson was frequently styled by him as "the father of the Indian Press" which he undoubtedly was, considering the length of time for which he was connected with it, and the knowledge he had of Indian affairs. *The National Magazine* owes much to Mr. Wilson. Notwithstanding the claims of his own paper upon his time, he never refused his services, when the proprietor of this *Magazine* applied for them, in giving him advice and more often in examining the proofs of articles by writers in England and other countries. Mr. Wilson has still many friends, among both Natives and Europeans, in this country. They belong to the elderly generation. To them this notice, however short and unsatisfactory, will be some consolation.

K. M. G.

THE FASHIONS OF MONEY MAKING.

There are many ways of making money, and perhaps it may not have occurred to most, even of those who are engaged in the pursuit, that there is a fashion in the operation, which varies, perhaps not so frequently as that of ladies' dresses, but not much less frequently than that of men's. The periods of change have become shorter and shorter as time rolls on, but each new fashion is distinctly marked, and the aspiring millionaire must run at a rapid pace now-a-days if he wishes to harness the comet in its flight.

The most ancient fashion recorded of amassing wealth was that of removing the chief of a tribe or state and reigning in his place. Such a position invariably commanded the greatest wealth within that community. Every tribe or state lived upon plundering its neighbours and consequently to be the chief robber was to be the chief owner of wealth. As tribes became merged into states, and states into nations the ideas of commonwealth occasionally prevailed, with unrestrainable relapses to old conditions, as during the latter centuries of the Roman Empire.

Trade, as a means of money making, made its first prominent mark in the marsh-bound isolation of Venice, but relapsed again under the power of personal greed which raised the doges to tyrannical power and killed the goose. Then as time went on the European Governments began to discover that by giving their citizens more liberty to trade the revenues of their countries increased. But here again there was some backsliding, as liberty was restricted by monopolies given to the favourites of kings and queens. This takes us well up to the reigns of the Stuarts in England and to a century later on the continent of Europe. All that time, the most fashionable way of making money was that adopted by military adventurers on land and by privateersmen at sea. The largest fortunes resulted to those who risked most.

and if a fellow's putting in five or six hours a day on his neighbour's character, he's mighty apt to scamp the building of his own.

"It's the fellow who has the spunk to think and act for himself, and sells short when prices hit the high C and the house is standing on its hind legs yelling for more, that sits in the directors' meetings when he gets on toward forty."

The moral appears to be that so long as firms and companies apply themselves studiously and exclusively to the business of their own profit making, competition can never be strained, but when they expend half their time in trying to imitate, surpass or obstruct the operations of their neighbours, competition has a tendency to pass the rubicon, beyond which relapse to monopoly is an ever threatening danger. The fact is that the march of circumstances has gone ahead of trading instinct and has upset old methods and safeguards without creating up to date new ones. There are doubtless plenty of level headed men keeping pace with the times, but there are many more, a vast majority it would appear, who ride unbroken hobbies which they are unable to control. The pace of a cavalry charge is not regulated by the maddest rushing trooper of a squadron, and if Trade Associations will endeavour to curb the too rapid advance of trade by similar salutary regulations, a *debacle* will be avoided.

REG. MURRAY.

AN ACCOUNT OF NEPAL.

Nepal is a narrow tract of country extending for about 500 miles along the southern slope of the central portion of the Himalaya Mountains. The territory of Nepal entirely lies within this mountain range being about 500 miles long and from 90 to 140 miles broad. It is bounded on the north by Tibet, on the east by Sikkim, on the south by Hindustan and on the west by the British provinces of Rohilkand and Kumaon. Previous to 1815 the Kingdom of Nepal was very much more extensive, and included Kumaon with the whole country as far as the Sutlej river. Sir David Ochterlony, however, wrested those Provinces from the Gurkhas, and by the Treaty of Segowlee (1816) it was finally agreed that the river Kalo should form the western boundary between the British and the Nepalese Dominions. Nepal is thus hemmed in on all four sides between British India and the Chinese Dominions.

The Kingdom of Nepal covers an area of about 60,000 square miles—and its population is believed to amount to about 4 millions.

Along the whole extent of its northern side the snowy range of the Himalayas stretches in continuous and unbroken length and forms the natural boundary between Nepal and Tibet. The portion of the Himalayas which overhangs Nepal varies in height from 16,000 feet to 29,002 feet, and embraces within its limits five of the highest mountains, Thanda Devi, Dhawalgiri, Gosaitan, Kinchinjunga, and Mount Everest—the latter being 29,002 ft., the highest in the world. It looks like a saddle.

The Nepal Himalaya is traversed by several passes leading into Tibet :—1st The Gari Pass, 2nd Mustang Pass, 3rd Harag Pass, 4th Kuti Pass, 5th Hatia Pass, 6th Wallong Pass. These different passes are used almost exclusively by the Tibetans (commonly called *Bhotias*, as they are inhabitants of the country of Bhot or

Tibet) who flock in large numbers to Nepal from all parts of Tibet and especially Lassa and its neighbourhood during winter *viz.* November to March. These Tibetans bring down with them for sale in Nepal blankets of various kinds, and other woollen manufactures, as well as ponies, watch dogs, sheep, goats, crystal, agate, turquoises, yak-tails, gold dust, gold and silver ores and large quantities of rock-salt.

Provinces of Nepal.—The territory of Nepal, within the hills, from Kumaon on the west to Sikkim on the east is divided into 3 large natural provinces by four very lofty massive ridges:—1st the *western* division or mountain basin of the Karnali or Gogra river, 2nd the *central* division, or mountain basin of the Gundah line, 3rd the *eastern* division or mountain basin of the Kosi river.

Besides the three geographical divisions there is a fourth province or district, *viz.* the valley of Nepal Proper—which is the capital of the Modern Kingdom and the head-quarters of the reigning or Goorkha dynasty. This district occupies an isolated tract lying between the countries watered respectively by the Gondak on the west and the Kosi on the east. It is in the form of a triangle, the apex of which points to the snows, while its base rests on the low range of hills. It is watered by the river Bagmutty which receives several tributaries. These four districts—the basins of the Kumdi, the Gondak, the Kosi and the Bagmutti rivers—embrace the whole territory of Nepal within the hills. Below the hills the low lands constituting the Terai complete the remaining area of the Kingdom of Nepal.

This Terai extends from the Areki Nadri on the west to the Mictu on the east—a distance of about 220 miles. It is bounded on the north by the Cheryinghata range of hills, and on the south its limits are marked by a series of 8 pillars erected along the whole length of the frontier line which separates the country of Nepal from the British districts of Purnea, Mozufferpore and Champaran. Its greatest breadth nowhere exceeds 30 miles, in its narrowest part it is only 12 miles near the Kosi river, its average breadth being about 20 miles. The Terai consists, throughout its entire extent, of two very distinct portions, the sal forest and the open low land to which the name of Terai proper should

covers the southern side of the Cherynghata range throughout its entire length from the pass of the Gundak to the pass of the Kosi river. It varies in depth in different parts but has an average width of 5 to 10 miles.

The Sal forest as its name implies, abounds chiefly in Sal trees, but it contains also very many Sissu and Lamal trees as well as a considerable number of firs, &c., many of large size along the sides and crest of the Cherynghata range. Much forest has been cleared and the land, thus reclaimed, brought under cultivation. In this way the Terai revenue has considerably increased.

THE VALLEY OF NEPAL.

This district lies directly to the south of Gosainthan mountain and consists of an elevated plateau surrounded by hills. It is of a triangular shape and its apex points towards the north. Its western boundary is formed by the Trisulgunga river, which separates it from the province of Goorkha. On the east it overlooks the country of the seven(7) Kosis. Its base is towards the south and is formed by the range of the Sesapier and other lower hills which lie to the north of the valley and the district of Makwanpur. The large valley comprises a number of valleys along the small streams and tributaries of the Bagmatty river.

According to the tradition of all Hindus what is now the valley of Nepal, was, in the early age of the world, a large and very deep lake, of an oval form, and encircled by lofty mountains.

Mangnosi Boohssation has the credit of having converted this lake into a deep valley by cutting through Mount Kotbar on its southern side with his sword and so making a passage through which all the waters escaped. There is good reason to believe that this legend is based upon truth and that Nepal was in remote ages a a mountain lake enclosed in the hollow of the same circular range of hills by which the valley is surrounded at the present day. It is probable that in consequence either of one of those subterranean convulsions common to all mountain districts, or of the gradual but continuous elevation of its bottom or from both causes combined the lake burst its boundaries on its southern side, and that a large portion of its water escaped into the lower hills through the channel which is now the bed of the Bagmatty.

At the same time that its waters were being slowly off, the hollow of the lake must have been gradually fill

the soil constantly brought into it by numberless streams from the sides of the surrounding mountains.

These processes of drawing off and filling up must have gone on slowly, steadily, and simultaneously, so as to allow of the uniform deposition along the bottom of the lake of the soil and solid ingredients which were contained within its waters. In the course of time these deposits became more and more consolidated, until at length, the waters being dried up or drained away the entire Mountain hollow became filled up with a mass of alluvial soil. This view of the formation of the valley is confirmed by numerous facts, which can hardly be explained by any other theory : (1) At the present day, the continuity of the mountain barrier around the valley is so perfect that were it possible by any means to block up that one pass through which the Baghmatty flows down to the plains, not one drop of water could escape by any other channel, and, in the course of time, the accumulation of its pent-up waters would convert the valley again into a lake.

(2) Throughout its entire extent, the soil of the valley is purely alluvial, and is mostly arranged in strictly conformable or horizontal strata, such as can only have been formed by gradual deposition from a large mass of standing water.

(3) This alluvial soil consists almost entirely of clay and mud, and all around the confines its imposition corresponds in quality and even in colour with that of the adjacent hills. There is no kind of rock formation, even pebbles are ever hardly seen on the surface and stone can only be obtained from quarries on sides or spires of some of the surrounding mountains.

(4) The abrupt manner in which many of the boundary mountains emerge from under the alluvial soil; and the almost perfect uniformity of level of all the high lands not only on the edges but throughout the whole extent of the valley.

The shape of the valley is irregularly oval but its outline is a good deal interrupted by the numerous spires which project from the surrounding hills.

The long axis of the valley runs north to south and its average length is 15 miles, the width of the valley is somewhat less and averages from 12 to 16 miles. The valley is most abundantly supplied with water by numberless streams of various sizes which sides of the surrounding hills and converge more or

less towards the central Baghmatty river which by means of its tributaries drains the whole district of Nepal proper. The following are the principal tributary streams which fall into the Baghmatty during its course through the valley. The Bishenmatti, the Dhabukla, the Maenhpura and the Hanumamatti. The south and south-western portions of the valley are watered by several small streams—two principal being Tukchi and the Nikhu.

CITIES AND TOWNS.

The principal cities in the valley of Nepal are Kathmandu (the present capital) Patan, Bhatgan and Kirtipore, which were the capitals of the respective principalities until the Goorkha conquest in 1787. Besides these cities there are several large towns and numberless villages of various sizes situated in different parts of the valley. Many of the villages are mere hamlets but some of them possess an interest and importance disproportioned to their size, in consequence of their having been built in the immediate neighbourhood of some of the principal temples or most sacred spots within the valley.

The following remarks are applicable to each of the four capital cities in Nepal, Kathmandu, Patan, Kirtipur and Bhatgan. During the time of the Niwar Rajahs each city was surrounded by a high wall in different parts of which were large gateways, which generally remained open but in times of danger or disturbance could be closed and defended.

Since the Goorkha conquest of the valley the walls have been allowed to decay, and have now nearly disappeared, while many of the gateways are in ruins. The limits of each city are, however, still strictly marked along the lines where the ancient walls stood, and no Hindus but those of good caste are allowed to dwell within its precincts. This rule does not apply to Mussulmans several of whom reside within the city of Kathmandu, but it is strictly enforced against Hindu low castes, such as sweepers, butchers, executioners, &c., &c. all of whom are obliged to live in the suburbs of the city. This is much more attended to in Kathmandu than in the other cities. The number of gateways corresponded exactly with the number of squares (*tols*) within the city,—each gateway being associated with a particular square, and placed under the municipal control of the same local

authorities, who were as much responsible for the repair and defence of the gateway, as for the general management of the squares.

In each city the largest and most important building is the royal palace or durbar. It is situated in a central part of the city, and opposite to its principal front there is an open irregular square, which allows free access to the palace, and around which temples of various kinds are clustered together.

In all the cities there are a number of small squares irregularly scattered about. There are 32 in Kathmandu; and there ought to be 32 gateways; the principal public buildings, courts of law, &c., are generally situated on one or more of the sides of the square.

In Kathmandu, Patan, and Bhatgan, most of the principal temples are in the immediate vicinity of the durbar; many are within its precincts, and many more are crowded around or opposite its principal facade. At Kirtipur the Durbar was in the highest part of the crest of the hill on which the city is built; it is now completely in ruins, but around its remains several temples more or less decayed are still standing.

The durbars are usually of an irregularly quadrangular form, one side towards the rear being generally left open, and communicating with the gardens, stables, &c.

The outer facade of one or more of the other sides is open to the streets. The inner quadrangle is always private and is usually divided into a number of smaller courts of various sizes with buildings on all four sides. These inner compartments communicate one with another by gateways only which can easily be secured so that in case of danger or disturbance by closing them the inmates of the palace may shut themselves into the different parts of the building, and defend themselves with ease against a large number of assailants. These inner courts are apportioned to different purposes, some contain temples for the private use of the inmates of the palace, some are inhabited by the royal ladies, others are employed for public receptions and spectacles, while one or more are often used as stables for elephants. During the dynasty of the Newars, the durbar of Bhatgan was the largest and most costly of all in Nepal, and since the Goorkha conquest of Kathmandu, as being the residence of the King, has been in every direction, and kept in thorough repair, and it

is now accordingly the most extensive, though by no means the most ornamental or picturesque. The durbar at Patan was never so large as that of Bhatgan or Kathmandu, though it was of similar construction and did not contain so many divisions, while that of Kirtipur, which was very much less extensive than the others is now in such a state of ruin that it is impossible to tell what was originally the form or even the outline of the building.

The streets through the different cities are mostly narrow, crooked, and dirty. In Kathmandu alone there is a street leading to the durbar along which a two-wheeled carriage can be driven. In the other cities and through the greater extent of Kathmandu itself, the streets leading to the darbar as well those which traverse the town in all directions are more or less adapted only for foot passengers, horses and elephants. The streets do not appear to have been laid out on any particular system; 2 or 3 of the principal streets radiate from some of the gateways or the circumference of the city towards the durbar, which is usually situated near its centre and in their course they pass through some of the small squares (*tols*) with which each capital abounds. Other smaller streets connect the different squares and leading thoroughfares together, and these again are intersected by numerous narrow lanes, which ramify about the city in all directions.

The municipal streets are paved with stone slabs laid flat and the small streets and lanes are paved with bricks on edge—arranged very prettily. The roads leading out of Kathmandu to the rivers Bishmatti and Baghmatty are all paved with bricks.

There is entire absence in all the cities of any system of drainage; merely stagnant gutters on each side of the street, rising immediately below the house-fronts do the duty of sewars; into them most of the filth and refuse of the adjacent buildings find their way. The Maharaja has just begun (October 1899) making deep drains in Kathmandu. He has also laid down water brought from the Boror Wilkate hills, which I visited a few days before I left; the quality of the water is excellent.

Numerous temples—Buddhist and Hindu are situated in different parts of the cities. The Hindu temples are generally placed near some of the principal thoroughfares; but all the important Buddhist temples are situated a little off the road and in

the centre of squares or quadrangles which have been built around them, and which are inhabited exclusively by Buddhist Newars.

None of the houses consist of less than two floors, and they are mostly 3 or 4 or even 5 stories high. They are strongly built of red burnt brick and have overhanging pent tiled roofs, the projecting eaves of which rest upon a number of short wooden supports which slope upwards from the walls of the houses, and are often curiously and elaborately carved into the shape of grotesque monsters &c. The frame work of the roof consists of wood and it is covered with red tiles (resting upon a layer of adhesive clay) which are ingeniously curved in so that they mutually overlap and support each other, and are so grooved that when in apposition they form a series of little continuous channels by which all rain is quickly carried off from the surface of the roof. The ground floor of the house, towards the street, usually consists of an open balcony, which serves either for a shop, or for a convenient lounging and sitting place for the inmates of the house. This balcony communicates in almost all houses, by a low doorway with a quadrangle behind, which is open to the sky above and is closed on all four sides with buildings, the windows of which look into it. Almost every house of any size, public or private, contains a quadrangle of this kind, round which the rest of the house is built. The size of the quadrangle of course varies in extent and it serves as receptacle for the washings and filths of the surrounding buildings. The large houses contain 12 to 20 or even more families of the poorer and working classes but of the same caste and trade.

In all houses the ceilings are low, the doorways small, and the windows (which consist of very massive frames, often beautifully and elaborately carved on the outside) are without glass and can only be closed by wooden shutters, and so the rooms are confined and badly lighted. Stair-cases are unknown, and the connection between the different floors of which a house consists is effected by means of ladders to narrow trap doors which can be quickly closed and easily defended.

Kathmandu being the capital of the kingdom is the most important city of Nepal. It is situated towards the western side of the valley and stands on the east or left bank of the near the confluence of that river with the Baghmatti.

It is of an oblong form, and is said by the Buddhist Newars to have been built after the shape of the sword of its great founder, Manjusri; while the Hindus profess that it resembles the sword or scimitar of Devi. The greatest length of the city from north to south is about a mile and its breadth varies from $\frac{3}{4}$ to $\frac{1}{2}$ of a mile; on the west Kathmandu is bounded by the Bishnumati, and its streets or those of its suburbs slope down rather steeply from the higher level on which the greater portion of the city is built, to the edge of the river, which flows in some places directly below its very walls.

The Bishnumati is crossed by two pucca bridges, over one of which passes the road from the city to the arsenal, artillery barracks and parade ground, and over the other the direct road to the temple of Shambhunath,

On the east and south the city overlooks the low lands which lie along the courses of Dhabonolin and Bagmatti rivers.

The earliest name by which the city was known, was Mangri Palan, having been so called by Manjusri, its traditional founder, Its modern name is said to be derived from an ancient building which stands in the heart of the city near the Durbar, and which was originally and is still known among the Newars as *Kathmandu*, from *Kath* "wood" (of which material it is chiefly composed) and *Mandir* or *Mandon* "an edifice, house or temple." The walls of the city have been allowed to decay and in many places are now hardly distinguishable. Many of the gateways, of which originally there were 32, are still standing, but the gates themselves have long since disappeared. There are said to be 32 small squares or lots, in the city corresponding to the gates.

Numerous as are the different Hindu temples around and in Kathmandu, there are none of those of any peculiar interest or beauty. The Talliju temple is the most important, and the most imposing in its appearance.

There are several Buddhist temples in different parts of the city; of these the most interesting are *Kathisambhu* and Buddhist-mandal—the number of Buddhist Newars in Kathmandu is small compared with that in Patan, and the Buddhist remains and temples are not therefore so numerous in the former as in the latter city. It is believed that the Buddhists in Kathmandu scarcely amount to half of the Newar population, whereas in Patan fully

3rd of the Newars are Buddhists. The population of Kathamandu is probably not less than 60,000 nor more than 80,000, of these, the great bulk are Newars, the Goorkhas forming but a very small minority. Outside the city, on the east is a level grassy plain $\frac{1}{2}$ mile long, and from 200 to 300 yards wide which is the grant parade ground. It is called the Thuni Khel town.

On its western and southern sides are barracks for some of the regiments which are stationed in the capital. There are three statues around the Tuni Khel one of Bhimsen Thappa, another of Jung Bahadur, and a third, Jung's youngest brother Dhir-Shumsher, the father of the present Maharajah. There is a monument, like the Ochterlony monument built by Bhimsen Thappa. It is 200 ft. high and tapers from its base to the summit. It was not raised to commemorate any particular epoch or event but apparently for the purpose of "astonishing" the natives and it well deserves the name of "Bhim Sen Thappa's folly."

Kathamandu like the other cities and towns abounds in temples the most famous being Temple of Mehnekal under which name the Hindus worship Siva or Mohadeo. There is another temple—still more sacred but situated about 3 or 4 miles outside the city on the north-east, it is called *Pushupati*. All Hindus visit that shrine before starting on a journey. In 1852 Jung Bahadur built a temple to Jaganath which had been commenced by his great uncle Bhimsen Thappa on a grand scale, but left unfinished because he died shortly after. Bhimsen Thappa also built a palace between the city and the parade ground—and it was his residence and that of his nephew Mertabar Sing who succeeded him as Prime Minister. It is a fine 4-storeyed building overlooking the city on the west and the parade ground on the east. In fact this old palace commands a good view of the whole valley and of the snowy range. I was accommodated in the upper hall of this palace during my 3 months sojourn in Nepal and so you can imagine I had a treat of the beautiful scenery of the Nepal Valley.

PATAN, BHATGAN AND KIRTIPUR.

Patan or Lallitan. Patan is the largest city in Nepal. It is on the high ground to the south of the Baghmatti about

half a mile from its left bank and $1\frac{1}{4}$ mile from Kathmandu to the south-east.

Previous to the Goorkha conquest Patan was the capital of one of the three independent principalities into which Nepal was divided; this was the residence of one of the Newar Kings and was at that time a wealthy, powerful and important city.

At the surrender of Patan to the Goorkha king and invader Prithya Narayan, in 1768, the city was given up to plunder, the nobility and principal men were murdered, and the greatest barbarities were practised on the unfortunate inhabitants, who being mostly Buddhists received but little mercy at the hands of their Hindu conquerors: the royal palace was dismantled, the dwellings of the wealthy citizens were robbed, and even the temples were not spared. Patan has never recovered from the blows it then received, and the consequence is that the city has gradually and steadily declined, the Durbar, public buildings and most of the temples have fallen into a ruinous, and dilapidated state for want of funds, as the temple jagirs were mostly confiscated by the Goorkha conquerors.

Although the Newars of Patan were mostly Buddhists, the royal family were Hindus and their sympathies were with Hindu forms of worship. Accordingly most of the Hindu temples were clustered round the Durbar while the Buddhist temples were scattered in the different parts of the town and suburbs. There are several squares in different parts of the city and some of them are much larger than any either in Kathmandu or Bhatgaon. By far the most curious and ancient of these squares are the quadrangular ranges of buildings, which are built around the most important of the Buddhist temples, with which Patan abounds. These quadrangles are called "Vihars" and in ancient times were monasteries which were occupied solely by Buddhist monks, their followers and pupils. There are in Patan 15 large and distinct Vihars at the present day. Patan has ever been and is still the stronghold of Buddhism in Nepal. Besides these 15 principal *Vihars*, there are a large number, more than one hundred, of other smaller *Vihars*, which are mere offshoots of the 15 larger ones. All these Vihars, not only in Patan but in the other capital cities and towns in Nepal, possess the same architectural characters.

They are double-storeyed, and built after the ordinary Nepalese fashion of burnt red bricks with massive wooden window-frames and doorways, and overhanging tiled roofs, the caves of which rests upon boldly carved wooden supports. The ornamental carvings of their windows and doorways are generally very elaborate, and on the stone gateways which form the entrances to some of them, are bold bas-reliefs of various mythological subjects.

Outside the walls of Patan are four large Buddhist temples, one opposite to each of the four cardinal points of the compass. A Buddhist temple is a hemispherical mound and round its base are the shrines and images of the celestial Buddhas and surmounted by a spire. The four temples around Patan have no spire. The largest Buddhist temple is some 4 or 5 miles from Kathmandu to the N. E., and the village is called Bodhnath and is entirely inhabited by Bhutyas.

Before the Goorkha invasion and conquest of Nepal—there was a flourishing Roman Catholic Mission in Patan—it came from China—rather expelled from there by the Chinese Emperor and was received and sheltered by the Newar kings of Patan who allotted lands for the support of the mission. But when the Goorkhas conquered Nepal—they expelled the mission out of the country and Father Guysepe, the founder removed and settled near Betiah—where it still exists.

Kirtipur stands on the west of a commanding hill about 200 to 300 ft. higher than the surrounding place—it has never been an extensive city. But its almost impregnable position gave it an unique importance, and it successfully resisted three protracted sieges by the Goorkhas who finally took it by treachery. Having obtained by treachery what they had failed to carry by force of arms, the Goorkhas murdered most of the principal inhabitants and cut off the noses and lips of all the males. The name of the town was ordered to be changed from *Kritipur* to *Naskatapur*, or the City of Cut Noses.

The city of *Bhatgaon* is situated on the eastern side of the valley at a distance of about 3 miles from the fort of Mount *Mahender Pokhu* and between 7 and 8 miles south-east of *Kathmandu*. It stands on a promontory of high table-land and on the right or northern bank of the Hanuman stream. For two (200)

hundred years before the Goorkha conquest of Nepal; the king of Bhatgaon had generally maintained a decided ascendancy on the two principalities of Patan and Kathmandu. At the time of the Goorkha conquest of the valley, Bhatgaon was surrendered to Prithi Narayan without a struggle, and it escaped in consequence a good deal of the plunders and maltreatment which were experienced by the other cities of Nepal at the hands of the conquerors.

The great majority of its inhabitants being Hindus, the Goorkha king—himself a bigotted Hindu—appears to have respected these temples and public buildings with which the city abounded. The aged king of Bhatgaon was treated by Prithu Narayan with considerable leniency; his capital was respected, and though the Goorkhas, of course, appropriated the entire revenues of the state, and the greater portion of those of the church or temples, yet they fortunately spared enough of the latter to enable the Newars to keep the majority of these temples in a state of very good repair.

It is in consequence of their unusual moderation on the part of the Goorkhas, that in comparison with Patan or Kirtipur, Bhatgaon still has a flourishing appearance; its streets and inhabitants have a cheerful aspect and its religious edifices generally are, at the present day, in fairly good preservation. The mass of the Newars of Bhatgaon being Hindus, most of the religious edifices which adorn the city are sacred to Hindu deities. The Buddhist temples and vihars are but few in number and not remarkable for their size or decoration.

ORIGIN AND CLASSIFICATION OF THE MILITARY TRIBES OF NEPAL.

I. Brahmans.

II. Khurs of which there are 12 sub-divisions, 1st Thappa, 2nd Bishuyat, 3rd Bhandari, 4th Karki, 5th Bhanga, 6th Adhikara, 7th Bisht, 8th Kemour, 9th Baniah, 10th Dani, 11th Gharti, 12th Khatfir.

The Ektharyas are insulated tribes, ranking with the Khur.

The Thakari are the royal lineages, ranking with Khur.

III. Magars of which there are three subdivisions, 1st Rana, 2nd Thappa, 3rd Alaya.

IV. Gurungs of which there are no subdivisions. The Brahman's

of Nepal are much less generally addicted to wines than the Brahmans of the plains.

The proper martial classes of Nepal are the Khus, the Magars and the Gurungs.

From the 12th century downwards the tide of Mussulman conquest continued to drive multitudes of Brahmans of the plains of Hindustan into the neighbouring hills, which now compose the western territories of Nepal. There the Brahmans soon located themselves. They found the natives, illiterate, and almost without creed, proud and fierce. To confirm the influence derived from their own learning, they determined to convert these Parbuthias to Hinduism. To the earliest and most distinguished of their converts they communicated the rank of the Kshettrya order. The same rank was also given to the offsprings of Brahmans by hill women.

Almost all the officers of the army are of the Khus tribe. Magars and Gurungs combined compose less than one half of the privates and non-commissioned officers. The Khus is generally slighter, more active and less fleshy than either the Magar or the Gurung,—more arrogant, passionately fond of arms, averse to all labor in arts, but will enter into agricultural and pastoral pursuits.

The *Kerats* are natives of Keranti district, a tract to the east towards Sikkim.

Loubra is the name of an eastern tribe who are also now enlisted as sepoys; they are low castes like *Kerats*. They are remarkably good sportsmen.

Magars and Gurung military tribes supply a large number of the soldiers of the Nepal army.

In Nepal all service, but especially all military service is by annual tenure, and all tenure of lands attached only to actual service; and the usage is to change a considerable number of the men annually in order to have a larger available body of trained men scattered over the country. Thus the state can afford to pay at once. A man off the role is called or termed *Dakhiral*, one in employ is *Jaghriah*.

DIVISIONS OF CASTE AMONG THE NEWARS.

The great division of the Newars is into :

1st. The Sheo-margi Newars who are worshippers of Shiva, and are, in fact, Brahminical Hindu.

2nd. The Buddha-Margi Newars, who are worshippers of Buddha.

Of the whole Newar population one-third is probably Hindus in its religion—the remaining two-thirds being Buddhists.

The *Skeo-Margi* Newars consist of 14 divisions or classes :

1st. Upadaya or Priests—Brahmins of the highest class.

2nd. Lawarji, also Brahmins and priests, but inferior to the Upadaya and so on. The first three are Brahmins, 4th, 5th, 10th and 11th are Kshatriyas, 6th, 7th, 8th and 9th are Vaisyas, 12th, 13th and 14th are Sudras.

The Buddha-Margi Newars are divisible into three principal classes :—

1st. Orthodox Baudyas or "*Bauhras*" whose heads are closely shaven.

2nd. Orthodox Buddhists, but not Bauhras who wear a top knot of hair upon their crowns, and are collectively called "*Udas*."

3rd. Inferior to Heterodox Buddhists who combine Hinduism with Buddhism, who are Buddhists by name, but are more or less Hindus in reality.

For the size of the country, Nepal possesses a great variety of races in its population. The principal of these are the Goorkhas, Newars, Moguls, Gurungs, Limbus, Virates, Bhotyas and Lepchas.

The Goorkhas or Goorkhalis, so named from the former capital of their country, are the dominant race. They formerly occupied the district around the town of Goorkha, which is about 40 miles west of Kathmandu. They are said to be of Rajput descent and to have been driven out of Rajputana on the occasion of an invasion by Mussalmans. The Royal family claims to have descended from that of Udaipur. They first settled near Patna, having passed through the Kumaon hills, and gradually extended their dominions to Goorkha. They invaded Nepal valley in 1767 and the country to the eastward, and have remained the ruling race ever since.

The Goorkhas are in general fine looking men. Some of the higher castes, such as are found in some regiments of the army, are tall and slim in figure, but muscular and wiry, and have high features like the people of Hindustan. However, owing to inter-marriage &c., the various races have become much mixed. They are essentially a military race, and form the bulk of the army. They are temperate and hardy and make good soldiers, but they

are by no means industrious, and take but a little share in the agricultural or mechanical labours of the country. They live chiefly in Kathmandu, but many are scattered about in the other towns and throughout the country.

The Newars constitute the largest section of the inhabitants of the valley, but are not numerous beyond its limits. They were the occupiers of the country before the invasion of the Goorkhas, and they still form the bulk of the population of Patan, Bhatgaon, Kirtipur, and most of the smaller towns. They are in general a shorter set of men than the Goorkhas, and their features are more of the Mongolian type. They perform almost all agricultural and mechanical work of the country, and many of them are skilful carpenters, masons, workers in metal, painters and embroiderers. Most of the trade of the country too is in the hands of the Newars, and a few of them are very wealthy.

The Magars and Gurungs inhabit chiefly the country to the west of the Nepal valley. They are short powerful men, of Mongolian cast of features. These are the men mostly to be found in what are called the British Goorkha Regiments.

The Limbus and Kerates occupy the hill country to the eastward of the valley. The Limbus are much employed in the army, and they and the Kerates are famous as hunters. They are both short, flat-faced people, powerfully built, and decidedly Mongolian in appearance.

The Lepchas occupy the hill near Sikkim and in general characteristics closely resemble the Bhotyas.

The Bhotyas are the hillmen living around the valley and between it and Tibet. They are powerful, muscular, but ugly people, and much of the carrying of burdens is performed by them, and the load they can bear is surprising. The Bhotyas always carry loads on their back, supported by a strap across the forehead, whereas the Newars invariably carry them in baskets with rope across the shoulders. In addition to the regular inhabitants of the valley a number of Natives of Bhotan and Tibet visit it in the cold season, generally living around Boothnath and Sumbhunath.

A few muslimans consisting of Kashmiri and Irraki merchants live in Kathmandu.

These various races differ greatly from each other in many respects. The language used by the Goorkhas is Parbatya, which is a

modern dialect of the Sanskrit and is written in the same character. The Newari language is quite distinct and the written character is somewhat different. The other races have each a language or at least a dialect of their own; and some of them, such as the Limbus and northern Bhotyas, use the Tibetan language.

The Goorkhas are decidedly the best dressed part of the population. In summer they wear pyjamas and a jacket or tunic of white or blue cotton with a *Kummerbund*, in which is invariably fastened a Khukri or large heavy crooked knife. In winter they wear similar clothes padded with cotton or, if they are able to afford it, lined with fur. The head-dress is generally a small closely-rolled turban of dark cloth, but they often wear a loosely folded pagri or gaudy little skull cap ornamented with tassel and braid.

The poorer classes of the Newars wear in general little but a waistcloth and a jacket of coarse cotton or woollen cloth according to the season. Some of the wealthier classes wear a handsome dress consisting of very full short trousers, a long tunic and a fur-edged cap. The head-dress of the Newars is a small skull-cap of black or white cloth and thinly padded with cotton and generally turned up for an inch or so at the border. The dress of the other races varies little from those already described.

The women of all the races dress much alike wearing a cloth by way of petti-coat gathered into a mass of plaits in front touching the ground, but short behind, barely reaching the knees. Besides this, they wear a jacket and a sari (shawl or sheet) which is either worn as in the plains of India, or wrapped round the body like a broad *Kummerbund*. Head-dress they have none. The Newar may be distinguished from the other races by having their hair gathered into a short thick club on the crown of the head, whereas the others have it plaited into a long tail, ornamented at the end with a tassel of red cloth or silk.

All the women wear, a profusion of ornaments, such as golden or brass plates with jewels on the top of their heads, necklaces of beads, (coral or gold) rings, earrings, of peculiar shapes nose-rings &c.

The handsomest, or at any rate, the most peculiar ornaments are worn by the Bhotya women and consist of necklaces of agate, coral, and other stones, massive chains, silver armlets of great size, bracelets of shells, and the like.

All classes are very fond of flowers and use them greatly for *ornamenting their head especially on festival days. But men and women generally have flowers stuck in their hair and behind their ears.*

FOOD OF THE PEOPLE.

The Brahmans of course live in the same way as their brethren in the plains of India—but they are less bigotted. Every morning they are to be seen returning from their baths in the Bagmati river fully dressed and wearing leather shoes and chanting their prayers. If you happen to brush them they don't resent or avoid lower caste men like some pharisees as you see them in Hindustan. They will also sit down on the same mat or carpet with lower caste men. The bulk of the population eat a great deal more of flesh and meat than is customary in India. The Goorkhas eat chiefly the flesh of khasis or gelding goats, which are imported in great numbers from the Terai and the northern hills. The higher classes also consume large quantities of game such as deer, wild boar, pheasants &c. The wild pig is also eaten. The Newars are great consumers of buffaloes and also of goats, sheep, ducks and fowls. The sheep they eat are all imported from the hills to the north and west, as they will not use the sheep from the plains of India, because they have short tails. The Meguls and Gurungs are Hindus but of low caste. The former eat pork but not buffalo's flesh; while the latter eat the buffalo, but not the pig. The Limbus, Kerates and Lepchas are Buddhists and live in the same way as the Buddhist Newars.

It is not very often, however, that the poorer classes can indulge in flesh—and the greater part of their food consists of rice and vegetables which are generally plentiful throughout the year.

The Newars and most of the lower castes consume a considerable quantity of a coarse spirit, called Rakshi, which is distilled from rice and wheat. It is prepared by families for merely home consumption and there is no tax on it, but a license is required if it is to be sold. Amongst the Newars, the consumption of this is habitual, but drunkenness is after all not very common among them—except on the *mela* days and during the season of transplanting the rice.

The higher classes, and the lower too when they can afford it, consume a large quantity of tea. This *brick* tea is imported from

Tibet. As might be expected among so many races, there are *several religions*. The *Kashmeries and Irakes are Mussalmans*. The *Goorkhas, a part or $\frac{1}{2}$ of the Newars, Magars and Gurungs are Hindus*. Their religion and customs are very much the same as those of the inhabitants of Hindustan, as they are divided into the same castes and observe the same rules as regards food and drink.

Polygamy is generally practised and some of the wealthy men have numerous wives. The marriage of widows is forbidden, and *suttee* was formerly of common occurrence. Since Jung Bahadur's visit to England this practice has been discouraged and various restrictions have been placed upon it. Thus women having children are not allowed to immolate themselves, nor are intending *Satis* prevented from altering their intention even in presence of the fatal pile. Formerly a woman having once declared her intention was forced to adhere to it and if she attempted to escape, she was stoned to death. These and other improvements are entirely due to the personal influence of Sir Jung Bahadur, and have been carried out in spite of the greatest opposition from the priests and Brahmans. The Goorkhas punish breaches of conjugal fidelity most severely. An erring wife is imprisoned for life, and besides subjected to severe domestic discipline, in the shape of a most cruel flogging. The dishonored husband was expected to cut down the seducer with his Kukri, the first time he encountered him. Sir Jung Bahadur however placed restrictions on this custom as he found it open to much abuse. The culprit is now arrested, and after his guilt is proved, the injured husband is allowed to cut him down in public,—the victim being allowed a chance of escaping by running away, for which purpose he is given a start of a few yards. Practically however his chance of escaping is very small, as he is generally tripped by some of the bystanders. The old laws against adultery, and also against breaches of caste, were most severe and brutal,—but as these revolting punishments are now things of the past, it is no use dwelling upon them.

Two-thirds of the Newars, Limbus, Kerates and Bhotyas are all Bhuddhists, their religion has become singularly mixed up with Hinduism, and there are several castes or divisions among them, but their customs are in the main much alike.

In their worship they make great use of offerings of flowers and fruits, and some sects, sacrifice buffaloes, goats, cocks and drakes

at their shrines. The blood alone is sprinkled on the shrines and the flesh is consumed by the worshippers. Formerly much barbarity was practised in the performance of the sacrifices, but of late years, thanks to Sir Jung Bahadur, the ceremony is restricted to the decapitation of the victim and the sprinkling of the blood.

The marriage tie is by no means so binding among the Newars as among the Goorkhas. Every Newar girl, while a child, is married to a bael-fruit, which after the ceremony is thrown into some sacred river. When she arrives at puberty, a husband is selected for her, but, should the marriage prove unpleasant, she can divorce herself by the simple process of placing a betel-nut under her husband's pillow and walking off. Of late years however, this license has been somewhat restricted, and a divorce cannot now be effected in so simple a manner; widows are allowed to remarry. In fact a Newar-in is never a widow, as the bael-fruit to which she was first married is presumed to be always in existence. Adultery is but lightly punished among the Newars. The woman is divorced and her partner in guilt has to make good the money expended by the husband on the marriage or failing this, he is imprisoned.

The Newars burn their dead and widows may, if they please immolate themselves as Satis but it is very seldom that they avail themselves of this privilege.

The laws of inheritance are not the same in Nepal as throughout Hindustan. The eldest son obtains the largest portion of the property of his deceased father, but provision is made for the younger children and widow or widows.

As the shrines in Nepal are estimated at the modest number of 2,733, it may be naturally supposed that the religious festivals are somewhat numerous. To a stranger indeed they seem to be never ending and the marvel is when the people find time to earn their livelihood. A few will be named here.

1. The Maet Chander Jatra in honor of the guard in duty of Nepal. The God's temple and image are at the village of Bagmati. On the 1st of Bysak the idol is worshipped with holy water and the sword of the king is presented to it, the image is then taken to Patan, mounted on a large car, in which is placed a shrine ornamented with carvings, ever-greens, flowers, &c. The progress lasts for several days, generally a week, as there are regular stages each of which the image halts for a day, and its attendants are

fed at the expense of the neighbourhood. The image remains at Patan for a month, and then on an auspicious day it is sent back to Bagmati.

2. Bajin Jagini Jatra on the 3rd of Bysak. Bajin was originally a goddess of the Buddhists, but is now worshipped by Hindus as well.

3. Sitta Jatra takes place on 20th Jeth, on the banks of Vishumuti, between Kathmandu and Sambhunath. After feasting, the people divide into two parties and have a match at stone throwing.

4. Gathen Mogol or Guy Fawkes of Nepal.

5. Baura Jatra—takes place twice a year on the 8th of Sravan and 13th of Bhadra. The Bonser or priests go about from house to house, and receive a handful of rice or grain at each, to commemorate their mendicant ancestors.

6. *Rakhi Purnima* takes place on the last day of Sravan, and is observed both by Hindus and Buddhists—the former tie an ornamental thread on the wrists of all their followers and in return receive presents—while the latter bathe in sacred streams to visit their temples.

7. Nag Panchami on the 5th of Sravan is the anniversary of a great struggle between a former Nag and Guru.

8. Janma Asthami—on the 8th of Bhadra is the birth-day of Krishna.

9. Gar Jalson—a purely Newar festival takes place on the 1st of Bhadra—in which Newars who have lost members of their family by death, disguise themselves as cows and dance round the palace of the king.

10. Big Jatra takes place on the 2nd Bhadra. The dancers on this occasion, ought to be disguised as tigers—being a repetition of the last festival.

11. Indra Jatra lasts for 8 days beginning on the 26th Bhadra.

12. Dasahra or Senga.

13. Dewali.

14. Khicha Perya—a Newar festival on the 16th Kartik—consists in doing puja to dogs and on this occasion all the dogs in the country may be seen with garlands of flowers round their necks. There are also days for doing puja to bullocks, crows, and frogs,—

what degrading idolatry! This is explained by the Buddhist belief *in transmigration of souls into the lower animals.*

15. *Bhai puja* or *Tika*—on the 17th Kartik every woman visits her brother's home and puts a tika or mark on his forehead and a garland round his neck, and then washes his feet, and gives him sweetmeats to eat. In return she receives a present of money, clothes and ornaments.

16. *Bala Chaturdash* or *Sathya* takes place on the 4th Aghran.—People on this day visit the forest near Pashupati and scatter about rice, vegetables and sweetmeats.

17. *Kartik Purnima*—On the 1st Kartik many women go to Pashupati and remain there the whole month fasting, on the last day (or purnima) of the month they have great illumination and singing and dancing when the fast is over.

18. *Ganesh Chauth* is held on the 4th Magh—in honor of Ganesha the god of wisdom. Fasting and worship are the order of the day.

19. *Basant* or *Sripanchami*—this takes place on the 20th Magh in honor of Saraswati, the goddess of learning.

20. *Holi*—takes place on the last day of Falgun.

21. *Magh Purnima*—when *Newars* are carried from the river after bath in ornamented doolies to their temples.

22. *Ghora Jatra*—on the 15th Chait—all horses and ponies belonging to Govt. are assembled on the parade ground, and raced past the king and officials.

OCCUPATION.

Priests and Brahmans of course are very numerous and have much influence in a country where there are so many temples and at least half the time of the people seems to be spent in pujas and religious holidays.

Astrologers form another large class of the learned community. In Nepal astrology must be a profitable pursuit, as no great man thinks of setting out on a journey, or undertaking any business whatever, without having an auspicious day selected.

Baidas or medical men are also numerous in Nepal and all families of any importance have Baidas attached.

Chemical works and Accounts are performed by *Newars*. Lawyers

are not held in much estimation. The Maharajah is the Court of appeal, and he delegates his duty sometimes to the Commander-in-Chief.

The old savage code of punishments, involving mutilations, stripes, &c. was abolished by Sir Jung Bahadur on his return from England. Treason, rebellion, desertion in time of war and other offences against the state are punished by death or imprisonment for life; bribery and peculation by government servants, by fines, imprisonment and dismissal from office.

Killing cows and murder are punished by death, maiming cows and manslaughter, by imprisonment for life, and other acts of violence, by imprisonment or fines.

Brahmans and women are never capitally punished. The severest punishment for women probably is imprisonment for life with hard labour and for Brahmans the same with degradation from caste.

Slavery is one of the institutions of Nepal. Every person of any means has several slaves in his household, and the wealthy have generally a great number of both sexes. It is said that there are from 20 to 30 thousand slaves in the country. Most of them have been born slaves; but free men and women with all their families may be sold into slavery as a punishment for certain crimes, such as incest, and some offences against caste. In a few of the wealthier households the female slaves are not allowed to leave the house, but in general they enjoy a great deal of freedom in this respect, and the morals of the female slaves are very loose in consequence. They are generally employed in domestic work, wood-cutting, grass-cutting, and similar labors. The price of slaves ranges for females from Rs. 150 to Rs. 200, and for males from Rs. 100 to 150. They are usually well treated, and on the whole seem quite contented and happy. Should a slave have a child by her master, she can claim her freedom.

All the trade and manufactures of the country may be said to be in the hands of the Newars and a few foreigners like the Kashmiris and the Irakhs who have been settled at Kathmandu for generations. There is a community of about 3,000 Nepalese established at Lassa—where there is a Nepalese *Vakil* (Consul or Resident), and these, who are chiefly Newars, carry on the trade between

Nepal and Tibet. Most traders, in corn, oil, salt, tobacco, confectionery and other articles of domestic consumption are Newars.

The manufactures of the country are few consisting chiefly of cotton and coarse woollen cloth, a peculiar kind of paper (made from the inner bark of several species of trees), bells, brass and iron pots, ornaments of silver and gold and coarse earthen ware. All the mechanics of the country are Newars, except a few workmen from the plains of India, employed by the Government in the public workshops and arsenals.

The great bulk of the population is employed in agriculture, as almost every family holds a small piece of ground. The soil of the valley cannot be said to be good, but the inhabitants certainly make the most of it. Every available scrap of ground is cultivated, the hill sides being terraced wherever water can be obtained for irrigation.

Indian corn and rice are the chief crops in the hot weather and in the cold weather, wheat, garlic, radishes, red pepper, ginger, potatoes, &c., and gram. Most lands yield their crops every year, and from some even three crops are obtained. The work of cultivation is done almost entirely by hand—though of late years the plough is being used more extensively. The women do most of the work in the fields.

There are few cattle in the valley, as there is no grazing ground except at the foot of the hills. Buffaloes, sheep, and goats for food are all imported. What few there are in the valley are of inferior breed. Ducks and fowls are plentiful and of good quality.

The military art of course has great attention bestowed on it by the Government.

In fact, most of the revenue of the country is wasted at soldiering and in manufacturing many useless rifles and cannons. The actual standing army consists of 16,000 men. These are divided into 26 regiments of from 500 to 600 men each.

The regiments are formed on the British model and are drilled with English words of command, or at least what are supposed to be such. These are officered much in the same way as the English army. There is however, no regular system of promotion—all

appointments being renewed annually, and grey haired helmets are to be seen with some beardless colonels. In fact all the higher ranks are filled up by the sons and relatives of the Maharajah.

The revenue of Nepal is over a crore—The income from Terai is growing annually—it is derived from landtax, custom duties of the province of the salt, forest, and various great monopolies.

No good roads are to be found in the valley including the new town.

K. P. GUPTA.

MUTUAL FORBEARANCE.

The kindest and the happiest pair
Will find occasion to forbear,
And something, every day they live,
To pity and perhaps forgive.
But if infirmities that fall
In common to the lot of all—
A blemish, or a sense impaired—
Are crimes so little to be spared,
Then farewell all that must create
The comfort of the wedded state ;
Instead of harmony, 'tis jar,
And tumult, and intestine war.

The love that cheers life's latest stage,
Proof against sickness and old age,
Preserved by virtue from declension
Becomes not weary by attention ;
But lives, when that exterior grace
Which first inspired the flame decays.
'Tis gentle, delicate, and kind,
To faults compassionate or blind,
And will with sympathy endure
Those evils it would gladly cure ;
But angry, coarse, and harsh expression
Shows love to be a mere profession ;
Proves that the heart is none of his,
Or soon expels him if it is.

COWPER.

REVIEW OF BOOKS.

Himalaya Darsana by Tara Kumar Kaviratna—Printed at the Jayanti Press, 25 Pataldanga Street—published by Jnan Chandra Choudhary.

The second edition of this book has just made its appearance, considerably improved in size and shape.

The original Sanskrit slokas have this time been printed in Dev. agri characters. A considerable number of new slokas have also been added which have nearly trebled its volume. These slokas were suggested to the author at his second visit to the mighty Himalayas. The poetry and the sublime thoughts which they give expression to, speak for themselves. There is to be noticed in the book a halo of sublimity and deep reverence for the Maker of all whose presence is felt in every manifestation of nature.

Talks on Health—by Mrs. Brander—printed at the M. E. Press, Mount Road, Madras—published by the Christian Literature Society for India, London, and Madras.

This is a short book on Sanitation in the form of 11 lectures addressed to the young house-wives of India. The subjects of the lectures are very judiciously selected. The first 3 lectures give a short anatomy of the main organs of the body. The V and VI lectures briefly explain the Physiology of Digestion and circulation with some important practical suggestions for the improvement of both. The other lectures deal with—Exercise and Rest, Cleanliness, Sanitation of towns and villages, Water-supply, and Food-supply, &c., &c., &c.

The book will make a very nice and interesting text-book for young boys and girls.

Practical Medicine—February 1904—edited by Ram Narayan, L.M.S. (Punjab medical service, retired)—printed and published by the Medico Scientific Press, Delhi.

This is a very useful monthly medical journal. The number under review contains a few interesting articles contributed by qualified medical men. 'Urine analysis in a nut-shell' by B. K. Mitra, L. M. S., will, we think, be of service to his brethren in the profession. The *Practical Medicine* has one important feature to commend itself to the public—the medical profession specially—it proposes to make valuable extracts from the world's medical literature and to note in a collective form the new discoveries and the latest advances in the science of medicine. If this is done regularly we venture to think, the periodical will remove a distinct want and will be patronized by the medical profession and the educated community who have a taste for the science.

England—by J Nelson Fraser, M. A., Professor of English Literature, Deccan College, Poona—published by the Christian Literature Society for India, London and Madras—printed at the M. E. Press, Madras.

The object of the author of this nice book is to place before the educated Indian Reader, in an abridged form, an account of English Society in the present day. The want of a book which deals exclusively with the subject of English Life has been felt for a long time by English-speaking Indians who very naturally desire to have up-to-date information on the subject from an English writer instead of gathering it imperfectly at second hand from Novels, News papers, &c., &c., &c. An acquaintance with the modes of life of the ruling nation with whom the Indians come in contact in their daily intercourse and a knowledge of the main institutions of the mother country of the rulers, are, we think very essential. Mr. Fraser's book will undoubtedly be a reliable treatise on the subject and he has succeeded in placing before his readers an impartial review of the various aspects of English life in a very condensed form.

The language is simple and dignified and the author has spared no pains to make his work interesting and worth perusal.

printing is very good and the price in consideration of its importance is mere trifle. We hope, it will command a large sale ere long.

Asru—by Nrisingha Prasad Mitra—printed at the "National" Press, 24 Kalidas Singhee's Lane, Calcutta

This is a collection of fine short poems, lamenting the death of the poet Hem Chandra Banerjee—the celebrated author of *Brita-Sankar*. The deceased was undoubtedly one of the most splendid luminaries in the poetic horizon of Bengal. The author has ventured to present himself before the public gaze with a very praiseworthy object in view—that of helping the family of the late lamented poet (who "fell upon evil days" in the latter part of his life) with the proceeds accruing from the sale of this booklet.

As a tribute of respect to the memory of the late lamented poet, we venture to think, the public will receive it in the spirit in which it is written.

Report of the Society for the Protection of Children in India—Secretary, Rev. A. E. Summers, 136, Dharmatola Street, Calcutta.

We have much pleasure in acknowledging the receipt of a statement just published concerning the work of this Society from its energetic secretary, the Rev. A. E. Summers. Its object—"to prevent the public and private wrongs of children and the corruption of their morals"—is worthy of all praise and there could not have been a better way of ameliorating the condition of a large part of the lower strata of the people.

The Society has already enlisted the sympathy and hearty co-operation of a large number of public-spirited and influential gentlemen all over India. We have no hesitation in saying that it has supplied a long-felt want in this country, where the number of poor and destitute children unable to take care of themselves and without any one to look after them, is very large indeed, the extreme poverty of the inhabitants being mainly responsible for this state of things. There is extensive scope for the beneficent activity of the Society and from the report before us, we are glad

to find that it is unsparing in the fulfilment of its duty. The Society however is in need of funds to widen the sphere of its activity and we hope the generous public will lend their support to the noble efforts of the promoters of the Society with all their heart.

Hardless's "leave chart"—showing the leaves admissible to Government officers and servants of all services, classes and grades with a synopsis of general leave Rules—published by C. Ravenshawe, 27 Meleod Street, Calcutta.

The chart is an abridgement of the important portions of the author's 'Government leaves' for every-day-use and ready reference. It will, we think, be very convenient to government officials concerned to have it hung up before them on the wall. Just a look at it will refresh the memory and save much time and trouble.

Pocket Diaries—by Messrs. Hoe & Co, 5, Stringers St, Madras.

Last year we had occasion to say a few words on the cheapness, the portable form, and the nice get-up of the diaries of this well-known firm. This year we are glad to notice a further improvement in several directions, while the price remains the same. It contains the most valuable and up-to-date information on all subjects of everyday importance. The diaries will not compare unfavourably with the imported ones of the same value.

Amrita Madira—by Amrita Lal Bose, Manager, Star Theatre—published by Guru Das Chatterjee—printed at the Kalika Press—17 Nundo Kumar Chowdhury's Second Lane.

The book contains a collection of poems by the famous author, actor and manager of the Star Theatre. As a poet and fiction writer the author's wit and ability are too well-known to require any fresh notice. So far as we have been able to look into the book, we are of opinion that the pieces will undoubtedly maintain the credit of the author which he has so long enjoyed in this direction.

Sisupal Badha of Magha in Bengali verse—Part I. (Cantos 1 & 2)—
by Nobin Chandra Das, M. A. B. L., of the Provincial Civil
Service—printed at the Cotton Press, 45, Beniatola Lane,
Calcutta.

This is a translation into good readable Bengali verse of the 1st two Cantos of the famous Sanskrit work, Magha's *Sisupal Badha* so much admired by the students of Sanskrit literature. Magha belonged to an age when the decline of Sanskrit poetry had already commenced—when a cold and clear-cut artificial spirit from which the vital spark had fled and a laboured ornate style had supplanted that genial sympathy for Nature in all her forms and the sweet, graceful and animated style which characterised the age of *Kalidasa*. Considering the nature of the task, which the author had taken upon himself and the difficulties that lie in the way of a verse translator, we can fairly say that the production is a creditable one and that it speaks volumes in favour of the author's erudition, rich vocabulary and nice perception of artistic beauty in thought and language. The book will, no doubt, give a very good idea of Magha's poem to those to whom the original is a sealed book.

Hints on English Pronunciation—by Abdul Kanim, B. A.—Printed
at the Baptist Mission Press—Published by A. K. Roy & Co.

The author has made a distinct move in the right direction. We have very few books on this important subject for our boys in schools, where it does not receive the consideration it deserves. The University Examinations being all written, the students do not pay proper attention to the correct pronunciation of English words. In after-life they feel the consequence. They find it very difficult to talk with Englishmen or to readily understand when the language is correctly spoken to them. We are, however, bound to confess that all Englishmen do not pronounce the words of the language in the same way. We think this book will be of use to the students of English literature. In spite of the slight inaccuracies (which unavoidably creep into the first edition of a book like this) we are of opinion that the book reflects credit upon its author.

*Tara Bai—by Digendra Lal Ray—printed by G. K. Bose & Co.
at the Bose press, 63, Backu Chatterjee's Street.*

This is a play written for the stage. The plot has been taken from Tod's Rajasthan. In minor points the author has deviated from history and we think he has every right to do so, especially when he is writing a play for the stage. He has very aptly introduced a few new characters into the play which do not at all interfere with the main incidents of history but make the piece interesting and well-adapted to the stage. We have very little to add about the merits of the piece as the author is well-known in the field of Bengali literature. It is enough to say that the present work is a successful performance—the characters are ably depicted.

Forty Years—by Chundi Charan Sen, printed and published by Ramanimohun De at the "Bengal Press," 17 Madan Mitra's Lane.

This is a free translation into Bengali of the little novel by the famous Russian authors Count Tolstoy and Nicholas Chostomarf. An English translation of the above has been published in many of the well-known weeklies of Great Britain.

Unlike other novels, the story is instructive and full of moral instruction from beginning to end.

The original authors under the guise of story-tellers, have very skillfully discussed the result of placing implicit faith in the existence of God—the punishment of sin—the atonement of sin and such other highly metaphysical subjects. It goes without saying that the present compilation is a valuable addition to the Bengali literature as a record of foreign thoughts on important moral and religious topics. The language is clear and graceful and the translator seems to have spared no pains to keep up, as far as possible, the beauty of thought and expression of the original in his translation. We are very glad to recommend the book to the notice of the reading public, who, we venture to think, will not fail to appreciate the value of such an important book.

THE
NATIONAL MAGAZINE.

NEW SERIES.

NO. 3.—MARCH, 1904.

THE CONSUMPTION QUESTION IN FRANCE.

Is Consumption curable? Yes, reply the majority of French physicians, though the cure is, however, as slow a process as the contraction of the disease. The public authorities of the capital have at last taken action, thanks to M. Combes the Premier, who is resolved to combat and conquer the dreadful disease. Three of the principal Paris hospitals have been specially re-organised for the reception of tuberculous patients only. So long as patients are treated in mixed hospitals, there is no chance of a cure, isolation being imperative. This is the conclusion arrived at, both by public and municipal bodies. Excellent work is also being done by the Paris Municipality which has taken up the serious question of tuberculosis; having put its hand to the plough the Council has no intention to go or look back. "Forward" is its motto. The Municipal Council agrees with Professor Grancher, that "tuberculosis is the most curable of chronic maladies"; the remedy is found and defined. It is at the school and at the domicile that the enemy must, and will be attacked. Figures attest that the scourge afflicts more than one-third of the population of Paris, besides killing off one-sixth of the inhabitants. No epidemic in the country except cholera of 1832 at Paris has surpassed tuberculosis in fatal results. The Municipality proposes to combat the evil at the hospital by caring for the patient, protecting the *personnel*, and assisting the affected at their own homes. Quite half a million of Parisians reside in over-crowded dwellings, fatal alike to health and morality.

six members of a family occupying but two miserable rooms. And what rooms? Too frequently mere closets, devoid of light, deprived of aeration, too often humid, in a word the natural breeding-grounds of disease germs.

If it is found impossible to cure tuberculosis, it is at least desirable that an effort be made to prevent its being produced, that will spare future generations the decimation that ours experience. The school being a fruitful source of contagion, it is all the more important that children should be instructed all about the danger that may result from the improper habit of expectoration. Spitting is forbidden in Paris omnibuses and trams; this rule ought to be extended to cabs, steamboats and railways, managers of public schools and teachers ought to impress on the pupils the strict observance of hygienic rules. Why could not official medical attendants be instructed to give public conferences on Sanitation? Parents ought certainly to assist in these efforts for the betterment of health. Further, all dispensaries, whether public or private, ought to be informed of any case of suspected tuberculosis among children, and urge immediate relief accordingly. It is at the commencement—at its first stage that pthisis can be stopped, the bacillus is destroyed, and the tubercle, instead of ulcreating, becomes hard; in other words, the terrible disease is conquered.

Much has been done in France in the direction indicated above by the establishment of municipal school dispensaries. There are also several others, founded by private efforts, independent of those organised by the Municipalities. They are all urged to extend their good work so as to "prevent," as well as cure, tuberculosis. It is recommended that they should serve out liberally Codliver oil and Creosote, and provide for every dispensary supplies of medicaments from the Central Pharmacy, and so secure their being of first quality and at wholesale prices. It is also strongly urged that they should obtain healthy and cheap milk for all children. Another form of precaution is to make sure that the teachers are not phthisical themselves. So great indeed is the number of teachers of both sexes of the primary schools in Paris, suffering from tuberculosis, that no candidate for the two Normal or Training Colleges of Paris will now be admitted until first medically examined by an official physician. Consumptives are pensioned off and sent to special asylums. All places

of education are frequently and thoroughly disinfected. So much for precautions in French Schools.

Domiciliary precautions are no less praise-worthy as will be seen. The Municipal Council of Paris distributes written instructions, supplies spittoons, disinfects premises, and provides local sanitary offices and mayoralties with all needed disinfectants. In addition to this, the municipality inculcates the fact that tuberculosis is curable, and that it spreads by expectorated matters; it insists on all spittoons being washed out daily in cold water, and that all contaminated linen be scalded for at least five minutes. However in the eyes of the poor, these excellent precautions are not always very practicable. A better plan consists in having "inspection nurses" attached to the dispensaries, whose duty would be to visit invalids every second day, see that the medicaments prescribed have been taken and the doctor's instructions carefully followed, whilst taking care that hygienic measures are not neglected. This service of inspection nurses, or *infirmiers-surveillants*—for men do the nursing in France—could well be controlled by means of weekly or fortnightly reports. Such an experiment is well worth trying, especially in the very poorest parts.

Cases could be cited where whole families in France have become extinct from the results of tuberculosis. All doctors in charge of the dispensaries are unanimously agreed that among the medicaments supplied, the most necessary is a provision of sterilised milk. The latter is to be consumed on the spot, in the dispensary even. The poor classes are sold sterilised milk at the rate of 2½d the *litre* or 1½ pint, being a reduction of 50 per cent, on current prices, in addition to this humane concession, they are further supplied gratuitously with an apparatus for sterilising the milk themselves. In the case of poor people having no fires, the Municipal Council of Paris, provides for this, by according a subsidy of £8,000 to a company of dairymen who in return supply genuine milk and which has been sterilised in advance. The following is even considered a still more practical plan; that of distributing medicated milk as a fortifying aliment, for the loss of strength, and the absence of effective nutrition are the two great evils to be combated. All persons who lose one-third of their weight, are in danger of imminent death observes Doctor Seailles. The same eminent French physician further remarks that to-day

doctors have nothing to prescribe but Cod liver oil and Glycerine. He advocates the milk treatment, urging one quart daily of genuine milk as a powerful recuperative adjunct. The next important point is, to see that the patient takes that quantity every day. The same medical gentleman prescribes one pint of medicated milk, either iodurated, glycerined, or phosphated, &c., by the chemist; that would prevent the milk from being consumed by non-invalids; he also strongly recommends the preparation of meat powder, lentil, pea, and oaten meals. It is the progressive inanition, the wasting away, which constitutes the grave dangers that threaten the disease; hence, make sure to supply the equivalent of the loss by furnishing medicated nourishment in packets at the pharmacies. To cure those suffering from consumption, we must nourish them; to do this, it is essential that we should place at their disposal gratuitously such medicaments as they cannot afford to buy.

So very determined is the Municipal Council of Paris, and other interested bodies to crush tuberculosis to the best of their ability, and to drive it out of schools and homes, that nearly ten millions of francs are about to be expended to fight the plague to the bitter end effectively—however expensive the struggle may be. The municipality if necessary, will levy a special "tuberculosis tax". one farthing on the assessed property of the city would yield the necessary sum. The municipality could also claim a larger portion of the tax levied on the bettings at race courses in the suburbs. Small hospitals could be erected, having 2,000 beds, to isolate patients, where all modern medical appliances would be introduced. This organisation would supersede the cumbrous and disjointed plans of relief now in operation in some places, and while presenting few dangers would in minimising the disease, reduce to a considerable extent the cost of combating the insidious enemy. As will be seen, the local authorities are doing all that lies in their power to prevent the spread of tuberculosis at home. The good example which France has set—and of which she has every reason to feel proud of—is well worth following by other countries. It is by uniting together, and working in harmony that nations can achieve victory—the extermination of consumption.

THE VEDIC RELIGION.

VIII.

B.—THE VEDIC PERIOD.

The expression "Vedic Period," as pointed out before, means logically the period comprised between the time when in their search after God, to the question of questions, Who and where was He, the first answer given by our Aryan forefathers was that He was '*Dyauspita*,' the sky above—the blue vault with the sun, moon and all other shining bodies in it and that when this answer being worked out—driven to its logical consequences, was found insufficient to satisfy the growing intelligence and experience of the Rishis and a further search in a different direction became inevitable. This, however, is not the meaning that is ordinarily attached to it. Popularly the "Vedic period" is supposed to have begun when the oldest *Riks* of the Rigved Samhita were composed. It is in this popular sense that the expression will be used in the present chapter.

The number of years comprised in this period must have been very great. This is clear from the change in the language and thoughts in the oldest and in the most recent hymns. But on this point no definite answer is possible. To say that it comprised 500 years as Max Müller has done or 1,000 years as some equally competent scholars think, would not be even one of those guesses in which we argue from analogy. For no analogous fact is known to us.

On one point, however, the hymns give us very fairly accurate information. There can be very little doubt that most of the hymns comprised in the Rigved Samhita were composed when the Rishis were still living in the lands of the *Sapta-Sindhu*—the Punjab and the eastern Afganistan. Outside India the most distant places mentioned are the *Mujavan* hill and the land through which the Oxus (the Yakshu, VII. 18. 19.) flows. The

Mujavan hill, as stated before, is on this side of Balhik—modern Bactria and the land of the Yakshu mentioned in the Rigveda is probably Bactria itself. [The people of Bactria were called by the Iranians the *Bagdhis*. It is curious that we have a large population of this name in western Bengal and in Orissa (in Orissa known as Baghutis).] To the east the Rishis had hardly come as far as the Ganges. In the whole of the Rigveda that great river has only been twice mentioned—of which once only in an indirect way. The Rishis in describing the Sindhu (the Indus) and the other rivers of the Punjab have displayed much poetical thoughts and considerable enthusiasm. Had the Aryan settlement during the Vedic period extended as far as the Ganges, there can be no doubt, that something similar to this would have been found in connection with that great river also. We do not meet with any such thing in the Rigveda.

In the 53rd hymn of the third *mandal* mention is made of the *Kikatas*—a low aboriginal tribe with whom Bisvamitra and the members of his family came in contact.

কিং তে কৃৎতি কীকটেবু গাবো নাশিরং ছুহ্নে তপতি বর্ম।

আ নো ভর প্রমগন্ধ বো নৈচাশাখং মঘবনুংধরা নঃ। ৩।৫৩।১৪ ॥

"What do your cows do among the *Kikatas*? They give no milk to be poured on the *Soma* or to be used in the *Gharma* ceremony. Give to us the wealth of the Promoganda—give us, O Maghavan, the wealth of the low tribe." III. 53. 14.

The Mahabharat speaks of a place of the same name situated somewhere in Magadha (modern Bihar). Putting these two pieces of information together Weber decided that before the Vedic period ended, the Rishis had advanced as far as Magadha. I would venture to say that this conclusion is not warrantable. The same hymn that refer to the *Kikatas* tells us that its composer was the *purohit*—family priest of Sudas and of the Bharatas. Now it was in the land of the *Sapta-Sindhus* that the pious Trutsu King Sudas reigned and came out victorious in the battle with the Kings of the ten different tribes who had united against him. It was also here that compelled by the jealousy of Vasistha and his sons, Bisvamitra had to leave the Court of Sudas and go over to the Bharatas. It is extremely improbable that before they had even peacefully settled in the Panjab, the Rishis would come in

contact with the people of South Bihar. The *Kikatas* mentioned in *Rib* III. 53. 14, must be different from the people of the same name in Magadha. It is true that the *Ramayan* mentions a *Bisvamiṭra* living somewhere in Magadha—probably near the modern City of Buxar but the same epic makes *Sudas* king of *Ajodhya* (modern Oude) and *Vasistha* his family priest. The two great epics of Ancient India—the *Mahabharat* and the *Ramayan* in the form in which we now find them, are comparatively recent productions and it would be extremely unsafe to call in their help for the purpose of ascertaining a fact that occurred during the Vedic period.

By the time the earliest hymns of the *Rigveda* were composed the oldest deities—*Dyaus*, *Varuna* and *Aditi*—have lost their former supremacy. *Indra* became the supreme god of the period and next to him was the fire-god *Agni*. The mode of worship had lost its primitive simplicity and a form of sacrifice by means of clarified butter and fermented soma-juice, of a very complex character and performed by a number of priests working together, had taken its place (Barth)

Before beginning with the subject matter of this period I think it necessary to explain the method I intend to follow. In dealing with the Vedic religion one should be particularly on his guard not to philosophise too much, especially if he wishes to convince the Indian readers. Rightly or wrongly and I fear to some extent at least, rightly the Indian public are of opinion that what is generally described as the Vedic religion is not exactly what is to be gathered from the hymns composed by the *Rishis* but rather what each writer fancies it to be. They very properly do not care much to know what a writer has to say on the subject, but would like, if possible, to know what the *Rishis* themselves had said. It is therefore necessary that every remark made and every opinion expressed about Vedic religion should be supported by quotations from the hymns themselves. I would go even a step further. I think as far as possible the *Rishis* should be allowed to speak for themselves. The *Rigveda*, however, is a very bulky book. It contains more than one thousand hymns. To let my readers have anything like an adequate idea of the religious thoughts and beliefs contained in it, I shall have to put before them large and numerous extracts from it. Unfortunately most of the hymns do

not at first excite much interest. It is only when they have been studied with sufficient patience and care, and thought about, over and over, that the eternal truths relating to some of the highest problems of human life, hidden in them gradually reveal themselves. What then happens is something like what the Vedic Rishis experienced in generating fire by the friction of two pieces of wood. *Agni*, they believed, lay hidden or asleep in the sacrificial wood. But by taking two pieces of wood, one softer than the other, and moving the harder piece against the softer one, as if the object was to bore it, they succeeded in generating or awakening the sleeping *Agni*. At first a very tiny spark was observed. But if the movement were continued steadily and carefully, sparks went on increasing in number and volume and at last both the pieces of wood were ignited and the wistful sacrificers were delighted with the sight of the most youthful (*Yavistha*) god.

I shall now take up the most important of the Vedic gods one by one. Under the head of each of them a number of *suktas* selected from different parts of the collection will first be given without any remarks. This will enable the readers to form a general idea of the nature of the god. I shall next explain the important characteristics of the god and other important matters relating to his worship, supporting and illustrating my remarks, as largely as possible, by quotations from the hymns themselves.

A. C. SEN.

LEAVES FROM THE GOSPEL OF SREE RAMAKRISHNA.*

[ACCORDING TO M., A DISCIPLE.]

II.

Steamer-trip with Keshab Chandra Sen, leader of the *Brahmo* movement in Bengal.

CHAPTER I.

[*The Master in Trance.*]

This day the Goddess of wealth (Lakshmi) will be worshipped. It is the full moon after *Durga Pooja*; Friday, 27th October, 1882.

He was seated in his room in the Temple talking with Bijoy (Goswamy) and Haralal. A gentleman came in and said, "Keshab Sen has come; he is on board a steamer which has just come up here and is lying at anchor before the ghat.

A short while and Keshab's disciples came in and bowed down before Sree Ramkrishna. They said, Sir, here is the steamer for you; Keshab Babu is on board and has sent us to you with a request that you should get on board and join him. You may be assured, revered Sir, that you will enjoy the trip.

It is just 4 o'clock. A boat took the Master to the ship. Stepping into the boat he loses all sense-consciousness! He is in a trance (*Samadhi*). With him is Bejoy (Goswami).

M. is on board the steamer. As the Master's boat is coming up M. looks at the strange unique sight—the picture of this great saint with the senses all standing still and motionless, as it were, at the Blessed Vision that his soul now enjoys. He had got on board at about 3 o'clock in the afternoon. He was very eager to see the meeting between the Master and Keshab and witness the joy that was sure to spring up at such a meeting. He would like very much to listen to their conversation. The mind of many a young man like M. was captured, so to speak, by the saintly character of Keshab and by his unrivalled eloquence. Indeed

* Ramakrishna Kathamrita or the Gospel of Ramakrishna in Bengali. Part I, price one Rupee, four annas. Part II, in the Press.

many regarded him as their own flesh and blood and thus gave him their heart's love.

Keshab has received an English education; he is well versed in English Philosophy and Literature. In the next place he has on different occasions called the worship of Images by the name of 'Idolatry.' It is certainly curious that such a man looks upon Sree Ram Krishna with reverence and admiration and that he visits him at the Temple off and on! It shall be a most interesting thing for M. and others to find out the common ground on which they both meet together. The Master indeed holds that God is 'without form.' He is thus at one with Keshab on this point; but he also holds that *God is 'with forms'* too! He meditates upon God, the Absolute (Brahma); at the same time he does not neglect to worship with flowers, incense and other offerings, the Images of 'God with forms,' manifestations of the Deity, the Gods and Goddesses of the 'Hindu Pantheon'! What is more, he sings and dances before them with the madness that comes of the joy of the Lord! The Master unlike an ascetic lies down on a bed supported by a bedstead; the cloth that he puts on is red-bordered; he uses coats and stockings and slippers! With all this he is not of the world. The signs of him are all like those that mark out an ascetic from a householder; hence people call him a Paramahansa. On the other hand Keshab holds that God is without forms; he lives the life of a householder in the midst of his wife and children; he delivers lectures in English; he brings out a newspaper dealing with religious subjects; he does also attend in his own way to worldly affairs.

CHAPTER II.

The Master in Trance.

The boat has come alongside. Everybody longs to see him. They crowd to the gangway. Keshab is anxious to see that the Master gets on board the steamer in safety. It is with great difficulty that he gets back into sense-consciousness once more and is thus taken inside the cabin on the upper-deck. The state of Divine ecstasy (*Samadhi*) has not left him even now. He leans on a disciple as he is led into the room. He takes his steps unthinkingly; but the mind is fixed on God.

He has now entered the cabin. Keshab and others bow down

to him ; but what little sense-consciousness has been left is beginning to leave him. Within the cabin are a bench, a table and a few chairs. The master has been seated on one of the chairs ; Keshab on another ; Bejoy has, also, taken his seat. Other devotees, most of them *Brahmos*, are also seated—many of them on the bare floor. The cabin is a small one. Many remain standing at the door and the windows and eagerly peep in.

The Master is now in a trance. Absolutely devoid of outer-consciousness ! Everybody watches his face. Keshab sees that many people have come together within the cabin and that the Master is in need of more air. Bejoy, until lately a follower of Keshab, has after the schism become a member of another sect, the *Sadharan Brahmo Samaj*. He spoke against Keshab on different occasions with reference to his having given away his child-daughter in marriage to the young Maharajah of Cooch-Bihar in opposition to the well-known principles recognised by his sect. Keshab is thus a little unprepared to meet Bijoy whose visit to the steamer is most unexpected. Keshab leaves his seat. He will open the windows.

The devotees all look on with fixed eyes. The Master comes down from his trance. Even now the consciousness of the Divine Presence continues to be as intense as before. He talks to the Mother of the Universe in words that are hardly articulate ! Says he, 'Oh Mother ! why hast thou brought me here ? They are hedged round and are not free ! Is it, indeed, possible for me to save them out of their prison-house ?'

Is it that the Master looks upon men of the world as beings that are shut up within the prison-house of the world (*Samsar*), that can not get out into the free air of God-consciousness, that can not so much as see the Light Divine, that in short are bound hand and foot by things of the world ? Men of the world can indeed see only things within their 'prison-house' and they naturally think that the End of life is pleasure (of the senses), and attention to worldly affairs. Is it thus that the Master says to the Divine Mother, "Why hast thou brought me here."

There is Nilmadhab of Ghazipur present at this meeting. Observing that the Master has come back to sense-consciousness, he and a Brahmo devotee begin to talk of *Powhari Baba*—the great saint of Ghazipur.

A *Brahmo* (to Master). Sir, these gentlemen have been fortunate enough to see *Powhari Baba* at Ghazipore. The Baba is another holy man like your good self.

The Master has not even now got back the power of speech. The heart is full, he can not speak! He only smiles on the good man who talks of the *Baba*.

Brahmo (to Master). Sir, *Powhari Baba* has got your photograph, too, which he has put up in his own room.

The Master smiles again and points to his own body with his finger. He, at last, in a subdued tone says, 'A pillow-case! It is nothing but a pillow-case!'

CHAPTER III

[*One God with names different.*]

'The pillow and the pillow-case—the Soul and the body. Does the Master say that the body alone dies and the soul dies not; that the photograph is of the body which will not last for ever. Does he, for this reason, say 'Let us not set a very high value on a photograph which is of the body; let us rather worship Him who is the Ruler of the soul within?'

The Master went on:—"But there is one thing to be borne in mind. The heart of the devotee is the Temple of the Lord. It is indeed a fact that the Lord is more or less manifest in all things. But He is manifest in a special sense within the heart of the devotee (*Bhakta*). Thus a Zemindar can be met at any of the houses of which he is the Lord. Still people would say, the Zeminder may be usually seen in a particular drawing-room. The devotee is the Lord's drawing-room. If one wants to meet the Lord, one should seek an audience in this Drawing-Room.

[*God, Impersonal, and Personal:*

God of the Jnani, the Yogi, and the Bhakta.]

"The same Being whom the *Vedantists* call *Brahma* (the Absolute) is called *Atman* (Universal Soul) by the Yogis, and *Bhagavan* (God Personal with Divine Attributes) by the Devotees or God-lovers (*Bhaktas*)

"The Brahmin in his various relations to others is one and the same person. When his duty is to worship the Lord he is called the

priest. If the same man is employed in the kitchen he is called a cook.

"The Vedantists who seek to realize God the Absolute reasons, saying "Not this, Not this;" i. e. the Absolute is not this, not that, not any finite object, not the individual soul or the external world. When, as the effect of this kind of reasoning the mind is not moved by desires; when, in fact, the conditioned mind goes out of sight, then it is that one can attain 'True Knowledge' (*Brahmo Gnan*); then is it that one's soul gets into a Trance. Such a man realizes God, the Absolute, to be the only Reality, and the Phenomenal Universe to be consequently unreal. He realizes that Names and Forms applied to finite objects are like dreams; that God, the Absolute, can not be described by words; indeed that one can not so much as say that God is a Person!

"Thus the *Vedantists*. The Devotees or Lovers of God (*Bhaktas*) on the other hand think and feel a little differently. Unlike the Vedantists, they look upon the 'waking state' as a real state and upon the external world as *real* and not like dreams. They, also, believe in the reality of Names and Forms. They, say that the objects before us of the Universe are the works of God; who is a Personal God and is possessed of many attributes. The starry heavens, the Sun, the Moon; the mountains, the sea; men, birds and beasts; all are His glorious works. He is the rich man and these are His riches. He is both within and without. The most advanced among the devotees further say that it is He who has become manifest before us as the *Human Soul* and the *External World*—as in fact all the *twenty-four categories* mentioned by the philosopher. The Devotee unlike the Vedantist does not want to be the *same* as sugar itself; he would rather have a taste of it (Laughter).

"Do you know how the devotee actually thinks and feels? He says, "O Lord! Thou art the Master, myself am thy servant; Thou art my Mother and I thy child; or again, Thou art my Child and I thy father, or Thy mother." Or thus; "Thou art the Whole and I thy part." The devotee will not say, 'I am God (Brahma).'

"The Yogi (the Aspirant who seeks to be joined to God) wants also to realize the Universal Soul (*Atman*). His object is to bring into communion the finite soul with the Universal Soul. He tries, first, to put together his mind lying scattered, so to speak, in

the act of running after the world of the senses; he then seeks to fix his mind on the Universal Soul. Hence he feels the necessity of meditating on Him in solitude on a seat which causes no distraction.

"But it is one and the same Substance.* The difference is only as to the names. It is the same Being whom man calls by the name of the Absolute (Brahma), the Soul of the Universe (*Atman*), or God Personal with Divine Attributes (*Bhagaban*). The first is the name applied by the Vedantist philosopher, the second by the Unionist (Yogi) and the third by the Devotees or God-lovers (Bhaktas).

CHAPTER IV.

The Reconciliation of the Sacred Books—The Vedas and the Tantras :—God the Absolute, and God as Creator, Preserver and Destroyer.

The steamer has already left and is on its way back to Calcutta. Many are those that look on Sri Ramkrishna with eyes that do not move but drink the nectar of the living words that drop from his hallowed lips! They can not feel that the steamer is in motion. The Temple-garden of Kali is left behind. The eye can no longer see the picture of that beautiful Temple. Beneath are the sacred waters that reflect the blue firmament above. But the murmurs of the waves with crests of foam, into which they are broken—as the steamer passed cleaving along, are lost on the ears of the devotees. The magic of the blessed vision before them has thrown a charm over them all. Before them is a wonderful Being, a God-in-Man and a Man-in-God, with smiles playing on his sweet face filled with the joy of the Lord, with eyes the beauty of which was enhanced by the collyrium of Divine Love. They look charmed as it were on one who has given up the world and its pleasures—on one intoxicated with the love of the Lord—on one who looks not for any thing in the world except the Lord! .

The conversation went on.

Sir Ramkrishna: According to Vedanta Philosophy as understood by *Sankara* God the Absolute, (Brahmo) is the only Reality; and the world before us is unreal. Thus God personal

* Substance—"Substantia"—Spinoza

(*Sakti* or *Kali*) who manifests Himself to us as the Creator, Preserver and Destroyer is not a Reality in the sense in which God, the Absolute, is Real.

"But it is impossible to go beyond the jurisdiction of God Personal (*Sakti*), however one may reason 'Not this' 'Not this'—unless indeed stripped of one's sensuous nature one's soul is made one with the Unconditioned God, in that ecstatic mood, 'blessed and serene,' called Trance or *Samadhi*. When you say I am meditating upon God, even then, you are going about within that jurisdiction. O, you can not shake yourself free from the idea of a personal God possessed of Attributes.

"Thus God the Absolute, and God Omnipotent and Personal are the same. A belief in the one implies a belief in the other. Thus fire can not be thought of apart from its burning power. Nor can its burning power be thought of apart from the fire. Again, the Sun's rays can not be thought of apart from the Sun; nor can the Sun be thought of apart from its rays.

* "What sort of milk is it? Well, people say it is a whitish sort of thing. Now you can not think of the milky whiteness apart from the milk; nor can you think of the milk apart from its milky whiteness.

"Thus God, the Absolute, can not be thought of apart from the idea of 'God with Attributes' or God Personal and *vice versa*. The The Unconditioned, the Absolute, the *Noumenon*, the Substance on the one hand and the conditioned, the Relative, the Phenomena—the Attributes, on the other hand, are correlatives; the one cannot be thought of apart from the other.

"God Personal with Attributes, the Primal Divine Energy, as we conceive that Being to be, creates, preserves and destroys. The sacred books, the Tantras, call that Being by the name of *Kali* or *Sakti*, the Mother of the Universe.

"Thus God personal (*Kali*) and God Impersonal are one and the same Substance., I call that Being the Absolute or Unconditioned when I cannot think of Him as Active or creating, preserving or destroying. I call that Being personal and possessed of Attributes when I think of him as Active—Creating, Preserving Destroying.

"The Being is the same; only the names are different under different aspects. Thus the same substance expressed in different

languages is called *jāl*, water and *pani*. A tank may have four *ghats* (landing places with steps). The Hindus drink at one *ghat*; they call it *jāl*; Mahomedans drink at another *ghat*; they call it *pani*. The English who drink at a third call it water.

"God is one; only the names are different. Some call him by the name of *Allah*; some, God; some, Brahma; others, Kali; others again, Ram, Hari, Jesus, Durga."

[*God Personal: The Mother and Creation.*]

Keshab (smiling). Do say it once more, Revered Sir, in what ways Kali, the Mother of the Universe, makes Herself manifest in this world of Her sports.

Sri Ramkrishna (smiling): Oh! The Mother sports with the world, Her play-thing, under various aspects and various names. Now she is the Goddess Unconditioned, Absolute, Formless (Mahakali). Now the Everlasting as distinguished from Her works (Nitya-Kali). Under another aspect, She is the Goddess of burning *ghats* and cemeteries, the dreaded Being that presides over Death (*Smasan Kali*). Now again does she stand forward before us ready to bless, to preserve Her children (Rakshya Kali). Under another aspect, She appears pleasing in the eyes of devotees as the Mother of the Dark Blue Color—the Consort of the God of Eternity and Infinity. Those sacred books, the Tantras, speak of *Mahakali* the Goddess Unconditioned, the Absolute. When nothing was—no sun, no moon, no planets—nothing but Darkness Deep, there was alone my Divine Mother! As Mother of the Dark Blue Color (Syama) worshipped in Hindu homes, She is more accessible to man, and calls up his devotion in a greater degree—coming to him with Her favours and saying to him, Her child, 'Fear not.' She is the Goddess that is worshipped in Hindu households. As Preserver She appears in times of plague, famine, earthquake, drought or excess of rain. At cemeteries or burning ghats, she appears in the form of Death. The dead body, the jackal, the spirits of destruction (*dakini*, *ini*) are Her terrible companions! She lives in the midst of horrible scenes, those fearful environments! Streams of a garland of skulls thrown round Her neck, a girdle made of hands, are the symbols that mark Her out as the Dread All-Destroyer."

Now look at her mode of creation. At the end of a cycle, upon the destruction of the world, my Mother, good Matron that she is, puts together the seeds of creation. The mistress of a house has a hodge-podge pot of her own in which to keep sundry things for household use. (Keshab and others laugh).

Sri Ram Krishna (smiling) : Yes, my friends, that is indeed so. The mistress of the house has such a pot in her possession. In it are kept the 'sea-foam' in a solid state, small parcels containing seeds of cucumber, the gourd etc. She brings them out when wanted. Much in the same way my Mother keeps the seeds of creation after the destruction of the world at the end of a cycle. (Laughter).

"My Mother, the Primal Divine Energy, is both within and without this phenomenal world. Giving birth to the world she lives within it ! She is the Spider and the world is the Spider's web that she has woven. The spider brings out the web out of herself and then lives on it. My Mother is both the Container and the Contained !

"Is Kali, the Mother, of a black colour ? Oh ! no. She is so far away from human ken that she only *seems* to be black.

"Does not the sky look blue from a distance ? The sky near you is color-less. Pretty much the same is the case with sea-water. It is of a dark blue color when looked at from a distance. Come near it, take a little up in your hands and you find it colorless. Thus go near and realise Kali, God Personal with Attributes ; and she will appear to be the same as God, the Absolute, about whom no attribute can be predicated.

And the Master sang, drunk with the wine of Divine Love—

Song.

[Identity of the Mother and the Absolute.]

My Mother ! is She actually of a black color, O My Soul ?

O ! she has the various cardinal points to make her dress !

Lo ! the thought of Her brings light to the Lotus of the heart.

CHAPTER V.

The Enigma of Life.

Sri Ramkrishna (to Keshab and others) : Bondage and Freedom are both His making. That man is bound with the chains of

"Woman and Gold" is due to the illusion (Maya) that my Divine Mother has created as part of Her plan of the Universe. Again, the fact that man can shake himself free from his fetters is due to the mercy of the same Being, my Divine Mother. She will take Her children across the sea of the world and take off the chains with which they are bound hand and foot.

And the Master sang divinely with that voice which in its sweetness rose superior to the voice of the Gandarbhas, the gods in heaven, who sing there the glory of the Most High.

Song.

"My Divine Mother is always in Her sportive mood! The World indeed is her plaything. She shall have her own way! It is Her pleasure to take out of the prison-house and set free one out of a hundred thousand of Her children!

A Brahmo : Sir, She can if she pleases set every body free—Why is it, then, that she has bound us hand and foot with the chains of the world?

Sri Ramkrishna. Well, I suppose, It is Her pleasure. It is Her pleasure to go on with the sport with all those beings that she has brought into existence. The player amongst the children that touches the person of the Grand-dame need no longer run about and is thus not called upon to take any further part in the exciting play that goes on.

"The others who have not touched Her must run about to play, to the great delight of the Grand-dame. She would by no means be glad if everybody should touch Her Person and thus bring the sport to a close. Hence Her joy and her clapping of hands when out of a hundred thousand one or two are able to snap the string that binds the kite of the human soul to the world. (*Joy of the devotees present*).

"It is my Divine Mother that has said with a twinkle of her eye to the human soul as if in confidence, "Go and live in the world until further orders." Surely the human soul is not to blame! It is quite possible that she out of Her grace can turn away the mind from things of the world and thus give it freedom once more, and pure devotion to the Lotus of Her feet."

And the Master sang, placing himself in the position of the man of the world and laying the troubles of his heart before the Mother.

Song.

It is my Divine Mother that has created this delusion which has left man struggling in this sea of the world ! "O Mother," says Prasad, "Thou hast in giving me the soul secretly bidden it live attached to the world."

CHAPTER VI.

*Work without Attachment : or the Means of Union with God
(Karma Yoga).*

A Brahmo : Sir, Is it a fact that one can not realise God unless one gives up the world ?

Master (smiling) : Assuredly not. It is certainly not for *you* to give up every thing. You are very well as you are. There is in this world, both the Real Gold and the dross ! The pure crystals of the treacle are there and the liquid solution too, with all its impurities. Are they not both sweet ? (laughter) Oh, I should think you are very well. Do you know *nox*, a kind of play with cards ? Having taken more cards from the Player than were necessary, I have lost the play. You are far too clever for him ! You rest content some with ten, some with six, some others with five ! You have been clever enough not to take more from the player. So you have not lost the play. The play still goes on. That is all right ; don't you think so ? (Laughter).

"Verily I say unto you, it is no matter that you live the life of a householder, and that you are men of the world. Only you must fix your mind on God. Do your work with one hand and touch the feet of the Lord with the other. When you have no work in the world to do, clasp His feet to your heart with both hands of yours.

"The mind, you know, is everything. If the mind has lost its liberty, you must lose yours. If the mind is free you are free too. The mind may be dipped in colours red, orange, yellow, violet, green. It is like the white cloth just returning to you washed from the washerman. This white cloth you may dip in any colours you like. Do you read English ? then you must talk in English in spite of yourself (Laughter), you put on boots, you whistle ; in fact you do your level best to behave like a native of England. The Pundit reads Sanskrit ; so he must quote couplets

(*slohas*). If it is bad company that the mind is thrown into, it will colour one's thought and conversation. On the other hand, placed in the midst of devotees, the mind will meditate upon God and talk on God and God alone.

"The mind is every thing. On one side is one's wife, on another side is one's child. The affection for the wife is of one kind and the affection for the child is of a quite different kind !

THE HINDU WOMAN—VIII.

Let us now turn to India and see what sort of liberty is enjoyed by our women.

As it is said in derision by our reformers that the women of Bengal are shut up within the prison walls of the *senana*, we will place before the reader a picture of village-life showing the manner in which our women pass their lives.

Rising early in the morning, they repair to the garden of a neighbour to pluck flowers for worship. They then go the Ganges or any other river or tank to bathe.

After which they worship their deities. Returning home, they perform domestic work. Seeing that they are in want of salt, oil or any other thing, they go to a neighbouring house and take a loan of the same from the matron, which of course is given back on receipt of a supply. Although the neighbours may not in any way be related to each other, frequent intercourse engenders affection in them, so that, some are regarded as uncles, others as brothers or sisters and so forth. They account each other in terms that breathe regard and affection, such as *Khura*, *Khuri*, *Mama*, *Mami*, *Dada*, *Didi*, &c.

When owing to sickness or other causes, there is no one available in the house to prepare food for the family, a woman from a neighbouring house helps that family in cooking and performing other domestic work. She may be seen remaining in the house for days together. When a neighbour falls sick, a woman is seen ministering to his or her comforts, and, if necessary, attending the whole night like a sister of mercy." On occasions of *Pujaks* and festivals, females go to the houses of their neighbours, where they worship the deity and assist the inmates in preparing food or serving it to the guests.

When a grand festival takes place in a particular house, a very pleasant sight is seen. As long as the festival lasts, say

one week, the inmates of 8 or 10 families are invited to take part in the festival closing the domestic work of their respective houses.

They gladly accept the invitation and occupy themselves in preparing food and distributing the same to the guests as well as to the poor people, who as is the practice, come in large numbers on such occasions.

They identify themselves with that family in such a manner that it becomes difficult for a stranger to find out who are the real inmates of the house. The women of Bengal are not even confined to the neighbourhood.

They are allowed to go to the houses of their relations in distant parts of the country. There also they join in performing domestic work.

They have freedom to resort to temples to worship God. They are allowed to attend the religious gatherings at which *Kathakas* (কথক) expound the *Shastras*. Of course, a separate place assigned to them.

And, above all, they have freedom to go to the remotest parts of India on pilgrimage accompanied by their husbands and relations. Even amusement is not denied them. *Jattras* (country-plays) are performed at the houses of well-to-do persons or at public places on occasions of *Baraiari Pujah*, held yearly by means of subscriptions raised from the people and women are allowed to attend them, a screen being arranged to separate them from the male members.

It must be admitted that excepting near relations and neighbours, our females are not allowed to speak with the members of the male sex. They are veiled. In the case of young women, it is necessary that when going beyond the neighbourhood, they should be accompanied by a matron or a male relation. This, we think, is necessary. In all ages and climes women have been considered as prizes to be won by men. They are the causes of strifes and contentions from time immemorial. Women are endowed with charms which attract men, and, in order to avoid untoward consequences, it is necessary to protect them, when we read accounts of the sages of antiquity finding it hard to resist the charms of women, is it not expedient to guard the honor of our females?

Our English educated countrymen say that it is very desirable on the part of men to take women in their company if they wish to enjoy life in a proper manner. But, the question is, are we sufficiently advanced to do so without encroaching upon the sanctity of the female sex? Have we learnt to show respect to our women? Is not our idea of morality too low? Generally speaking, do we not consider women as objects for enjoyment only? We should first learn to respect them. But, this cannot be done by mixing with them in jovial parties. There is no doubt that interchange of thoughts between males and females leads to brilliant results. But the thoughts should be of a pure nature. Our first endeavour should be to mix with them in religious services. The good time-honored practice of *Kothokota* i.e. the exposition of the *Shastras* by *Pandits* should be encouraged, and males and females should sit together to hear the same. *Kothokota* should end with a conference, and our females may take the opportunity of getting difficult points concerning religion, explained.

From what has been delineated above, it is evident that one woman is not confined within the prison-walls of the *Zenana*. They have freedom to a great extent. But, it must be admitted that, false modesty is seen among our women, which on several occasions leads to a great deal of trouble and inconvenience. Suppose a young woman is travelling with her husband in a railway carriage reserved. The man gets a fit and falls down senseless. The woman out of false modesty would not call out for help, and the result of it may be serious. The case of a woman accidentally left behind at a station by her relative is also productive of bad results. Then, according to peculiar notions of modesty, a woman would not speak to her father-in-law or to the elder brother of her husband : but there is no objection to her not only speaking to the younger brother of her husband or to her sister's husband but cracking jokes with them. This practice is inexplicable. The two extremes should be avoided. There should be intercourse between male and female relations within the limits of decency. In upper and central India the freedom enjoyed by females is almost identical with what their sisters of Bengal are allowed.

The woman of Southern India enjoy greater freedom than

what has been conceded to those in other parts of the country. We will place before the reader an account of the position of Hindu women in the Deccan. There the Brahman women are not veiled. The people of the Deccan have no outer apartment in their houses, properly so-called. Well-to-do persons have separate rooms for the reception of gentlemen. But the females are allowed to come to these rooms. It may happen that when a gentleman is sitting with his friends, his wife comes to the rooms and asks her husband about certain affairs: but she is not allowed to speak to the gentleman in the room. There is, of course, no objection to her speaking to her male relations or friends. If any one comes to a gentleman's house and enquires of any inmate of that house, a woman has no objection to speak to him, no matter whether he is young or old, a neighbour or a stranger. There is no objection to any one speaking to his daughter-in-law or to his younger brother's wife. The females take their food in the presence of men. In fact, men distribute food to women. When marriage ceremonies take place, females go to the house of bride and take part in the ceremonies and enjoyments. In the presence of guests, a woman sits with her husband and performs the required ceremonies jointly with him. When grand feasts are given, women distribute food to men. A female may travel alone in a railway train. All that is necessary is that a male relation should purchase a ticket for her and see her well seated in the carriage provided for females. It is arranged beforehand that some one should write for her at the place of destination. Females are always seen going to temples unaccompanied by any male relation. Whilst there, they worship the deity or hear *Katha* i. e., recitation of the *Shastras*.

We will here mention an incident connected with Anusua Bai's recitation of the *Puranas*. When Pandita Roma Bai was at Poona before she left for England, a meeting has convened in the hall of the Female Training College of that city. Both males and females assembled to hear Anusua Bai's *Katha*. The males sat on one side of the hall and the females on the other. There was a screen separating men from women. The wife of a prominent member of the Puna community received the females. At the appointed time, Pandita Roma Bai introduced Anusua Bai to the assembly and requested them to hear her *Katha*. The lady

with the *Pothi* before her began to recite. Her good voice and clear exposition of the *Purana* pleased every one. This learned lady travels in different parts of India and expounds the *Shastras* to the people. Her work is of special value as being a woman, she succeeds in leading females towards religion. She goes from house to house expounding the *Puranas*.

The freedom enjoyed by the woman of the Deccan has not borne evil fruits. On the contrary, we find them good in every respect. Their hearts are advanced with noble qualities. They are obedient to their superiors. They are very industrious. They always look to the interest of the family. In the Deccan, *Dhotis* and *Dobgas* are not sent to washermen. The females wash them daily. Women of the lower orders are seen on banks of rivers and tanks washing clothes. Those belonging to the superior classes perform this work at their houses. The Brahmans of the Deccan do not use the sweetmeats sold at shops. The females prepare them. Excepting the wealthy, the *Dakshinese* do not keep servants. So that, the whole domestic work devolves on the female inmates of the house. Even, in respectable families, women prepare food for the inmates. On festive occasions, in addition to the ordinary items of food, sweetmeats of different sorts are prepared by women. Even educated females are seen devoted to domestic work.

We have shown the evil effects arising from the freedom given to women in the so-called civilized countries of the West. We have delineated the sort of liberty given to women in Bengal. We have given an account of the position of women in the Deccan. The question now is—Should greater freedom be given to our women? The freedom given to women by our *Dakshini* brethren seems to be desirable in every respect. But, then the question is—Is our society prepared to give it? or does the present state of our society warrant it?

In the Deccan, a proper use is made of the liberty given to women. There a wife is really her husband's *Saha Dharmini*. She is associated with her husband in the performance of religious work. She performs *Brotos* and ceremonies with her husband, repairs to places of worship with her husband, and goes on pilgrimage with her husband. She is seen in assemblies formed for hearing recitations of the *Puranas*. But, what is the meaning

of female liberty in Bengal? Some of our educated brethren, who are very much grieved to see our women confined within the four walls of the *Zenana* wish to take them to jovial parties or theatre halls. They wish to drive with them in the open air, dine with them in dinner parties and play with them in open places. Some of our young men are heard to complain that the union of a graduate of the University with an illiterate woman is undesirable. It cannot conduce to happiness. Who can see gold and mud united together? Is not the sight repulsive? Now, we ask, are our graduates really educated, and can they appreciate true liberty? We are sorry we cannot answer this question in the affirmative? Barring a few exceptions, the condition of our so-called educated young men is deplorable. They are readers of novels and love-tales, eaters of foreign food, drinkers of cherry and champagne and seers of dances and plays. And, as a matter of course, they wish their consorts to share with them in these enjoyments. This is the liberty which our young men wish to give to their copartners in life. We do not call these young men educated. They have filled their minds with facts and figures, but have missed the scope of education. Education forms the mind. It makes the heart of man pure. It raises him from corruption, ungodliness, and leads him to the right path. Compared with them, their so-called illiterate helpmates are better educated. When we see a man of high position under the influence of liquor, when we see him passing his time with strange women, when we see him unmindful of the welfare of the family, can we call him educated, although he may be the holder of University degrees and honorary titles? On the other hand, when we see a woman without letter, imbued with ennobling qualities, reprimanding her so-called educated husband and turning him from drunkenness and debauchery to the path of rectitude, should we not call her educated? In the western countries, women are often seen with books, and they are generally considered to be educated. But, barring some who are really so, they are readers of novels and love-tales, and lovers of fashions and frivolities. This brings us to the third point of our subject, *viz.* : "Liberty in giving a full play to the fashions of the day," which will be dealt with in the next issue of the Magazine.

D. N. G.

**ADMINISTRATION OF THE AFFAIRS OF CEYLON,
1896-1903.**

[EXTRACTS FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW.]

Ceylon, though geographically near, is still almost unknown to even the educated classes of India. The fact is, Ceylon is a colony that is under the direct Government of the British Crown. The people of Ceylon enjoy certain privileges which we ourselves do not enjoy. The climate is, in many respects, better than that of the Indian plains. It is exposed to the sea-breeze on every side, in consequence of which the general health of the inhabitants is always good. The aboriginal inhabitants, living in hills and forests are called *veddahs*. A considerable section of the civilised people trace their descent to Bengalees. Indeed, their facial features bear a remarkable resemblance to those of the Bengalees. Not many centuries ago, Bengal traded with Ceylon, and many Bengalees took up their abode in that island. The story of Sreemanta Sadagar lives in tradition. Ceylon is supposed to be the Lanká of the *Ramayana*. In the summary of the *Ramayana* story that occurs in the Vana Parva of the *Mahabharata*, Rama is represented as discarding the project of crossing over with his large army on boats and other vessels for the injury that would then be done to trade. The island was believed to produce gold in abundance. Hence it was called Suvarnadwip, or Svarnadwip, corrupted into the Serendip of the Arabs. We make no excuse for reproducing the last review by Sir West Ridgeway, the well-known Governor, of his eight years' administration of Ceylon. It teems with information that cannot fail to be of interest to the people of India. As the review is rather long, we shall reproduce it in four successive numbers.—ED. N. M.]

In a few days I shall have to bid farewell to this flourishing Island, which I have governed for the almost unprecedented period of nearly eight years, and it is now my duty to satisfy you that I have made an adequate and profitable use of the golden opportunities which an era of unexampled prosperity has placed at my disposal. I do not set myself the impossible task of proving that my administration has been faultless and unmarred by mistakes, but I trust that I shall be able to show that the opportunities I have enjoyed have not been neglected, and that I have done my best, and with some success, to develop your resources, profitably to invest your large revenues, and to improve and perfect the system of administration in all departments.

It is difficult to perform this duty without the appearance of boasting and self-glorification, but I am sure that, though some license even in that direction may be allowed to the veteran who puts off his armour, you will acquit me of any unworthy motive, and I will understand that I am actuated by no spirit of egotism or rivalry when I attempt to justify my administration and to show that I have not been an unfaithful steward. If I satisfy you that I have successfully emulated the vigour and efficiency shown by my predecessors in this important post, and if I succeed in leaving for the guidance of my successor a full and clear record of the position of your affairs, of what has been done, and consequently of what remains to be done, then the object of this statement, lengthy as I fear it must be, will be fully gained.

REVENUE AND EXPENDITURE.

In each of my annual addresses the first subject with which I have dealt has been that of your finances, and accordingly it is appropriate that in this history of my stewardship I should at the outset place before you as clear a statement as I can, of the Island's financial progress during the past eight years. Such a preliminary statement is essential in order to enable you to judge and criticize my administration. Had the seven or eight years of my Government been lean years of scarcity, their history must have been barren and uninteresting, for my policy must necessarily have been stagnancy, and I could not fairly have been blamed for the little progress made or the poor results achieved. But I have no such excuse. These years have been fat years of unprecedented prosperity: the period of my rule has indeed been financially a halcyon period, during which the revenue has advanced by leaps and bounds, practically without a check. Consequently, when you call upon me for an account of my stewardship you may fairly expect to hear that the development of the Colony and the improvement of the administrative machinery have been proportionately great. The expanding revenues which I have enjoyed have been more or less an unearned increment, for which directly, at least, no credit is due to me; but none the less heavy is the responsibility which rests upon me of showing that these rich resources have been wisely utilized, and that the accumulating treasure which you have entrusted to me during the last eight years has not been allowed to rust or lie idle.

It is natural that in examining the figures which tell the story of our financial progress in recent years we should turn back the pages and make comparisons with the previous period which immediately preceded my term of office. Such comparisons are inevitable, and, I may remind you, afford an excellent test of our progress. My distinguished predecessor justly claimed in his last address to this Council that the five years of his administration had been a period of almost unclouded prosperity and of unchecked progress, and, in opening the Council in the following year, I endorsed this view in the following words; "A more striking testimony to the prosperity of this Island I could not desire to have. Sir Arthur Havelock showed that your revenue in the year 1894 had reached the sum of nineteen and a half millions; that is to say, three and a half million more than in the year 1890, the last year of Sir Arthur Gordon's administration." I may add that the revenue for Sir Arthur Havelock's last year, 1895, was almost Rs. 21,000,000, or over four and a half millions more than in the year 1890.

The revenue of the Colony has increased from Rs. 21,974,573 in 1896 to Rs. 27,198,056 in 1902, the difference, Rs. 5,223,483, representing an advance of about 23 per cent. The highest point reached was in 1900, when Rs. 27,325,930 was collected, but it will be noticed that last year's figures are only very slightly behind, while there is every indication that the current year will beat the record, and that its revenue, apart from the pearl fishery receipts, will exceed Rs. 28,000,000. That this expectation is not too sanguine is shown by the actual revenue for the first three quarters of the current year, which is more than a million rupees in excess of the revenue for the corresponding period of 1902, while, if pearl fishery receipts are included, it is nearly two million rupees ahead of last year. With the exception of the year 1901, the revenue of each year has exceeded that of the previous year, the increases ranging from Rs. 760,954 in 1902 to Rs. 2,031,946 in 1897, while the revenue of the last complete year of my administration is Rs. 6,215,248 more than the last year of the previous *régime*.

The year 1901 was our one year of depression—if we can use that term for a year in which, even with a diminished revenue of nearly a million rupees, there was still a surplus over expenditure of more than half a million. There were decreases under eight of

the main heads of revenue, the chief falling off being under Customs, Railways, Land Sales, and Post and Telegraph receipts. There were several causes of the depression, but the main one was that in the early part of the year the money market in Calcutta was so tight that the Colombo banks made heavy remittances to India, to the serious disorganization of local trade. There was also great depression in the plumbago trade, and in consequence of over-trading in 1900 by the native shopkeepers, there were very heavy stocks to be worked off. Moreover, the year 1900 was remarkable, you will remember, for an extraordinarily large output of tea, and the year had proved a record one in nearly every direction; it was therefore not surprising that it should be followed by a year of reaction, and we may congratulate ourselves that the reaction, was so insignificant and transient.

The largest net increase is in the Railway Department, where expenditure has risen from Rs. 3,110,718 in 1895 to Rs. 4,897,546 in 1902. The Military contribution has necessarily increased automatically with the revenue from Rs. 1,646,808 to Rs. 2,220,819. Pensions account for Rs. 1,284,648, as compared with Rs. 995,911 in 1895. Expenditure on Survey has risen from Rs. 433,989, to Rs. 638,086, Education from Rs. 636,270 to Rs. 952,279, Post Office and Telegraphs from Rs. 813,114 to Rs. 1,125,136, Port and Marine, Colombo from 207,361 to Rs. 330,712, Botanic Gardens from Rs. 49,446 to Rs. 72,246, Supreme Court from Rs. 112,929 to Rs. 156,277, Registration of Marriages, Births, and Deaths from Rs. 75,843 to Rs. 117,475, and Miscellaneous Services from Rs. 606,702 to Rs. 1,234,658.

With regard to the increase of 28 per cent in Pensions, for instance, I take the following from the Auditor-General's report: "This is due to certain new, and it will be generally admitted wise, provisions. Formerly no one who drew a salary of under Rs. 250 per annum was entitled to either pension or gratuity. The consequence was that many men who had served Government faithfully for thirty or forty years in a subordinate capacity were, when they became too old to perform their duties, discharged without any provision for their maintenance during the remaining years of their lives. This not only amounted to a public scandal, but induced officers to make every attempt to retain such employes even after they ceased to be efficient; sinecures were found for them, or

practically no work was exacted. In some cases the retired employes were given charitable allowances, thus to some extent exhausting a fund which is hardly large enough for its legitimate purposes. The rule now is that all Government servants, however subordinate the capacity in which they may be employed—even daily-paid coolies—are, after a service of twenty-five years, entitled to a pension or gratuity. Among larger and more costly schemes of reform this has been lost sight of, but there is probably no measure which has given an equal amount of well-earned relief to the deserving."

Over a million rupees have been spent during the last few years on what may be termed extraordinary contingencies. Thus our representation at the Paris Exhibition cost Rs. 169,739, the despatch of our Volunteer contingent to the South African war Rs. 149,651, the Census of 1901 Rs. 135,121, and the purchase of Gangaruwa estate as an experiment station for the Botanic Gardens Department Rs. 132,520, while there have been exceptional demands upon the public purse in connection with the Jubilee of 1897, the lamented death of Queen Victoria in 1901, the visit of the Heir Apparent and his consort in the same year, and the Coronation of His Majesty King Edward VII. last year. Lastly, I may mention the Colony's contribution of Rs. 75,000 to the Indian Famine fund of 1900.

The financial policy of Government is sometimes criticized on the ground that every year there is a large Supplementary Supply Bill. Let me say at once that it has been my constant aim to keep down this supplementary expenditure as much as possible; but, as I remarked in my address on October 26, 1896, it is impossible to avoid it altogether in the case of a growing community such as this, and it would be a mistake, indeed pedantic, to delay satisfying urgent demands when there is money available. I would remind you also that, though this expenditure is "supplementary" it is not therefore necessarily "additional." What happens is this. Money is required for works for which there is an unforeseen but pressing necessity; on the other hand, it is nearly always possible to effect economies in the ordinary expenditure without seriously prejudicing any work of importance. Surely no exception can be taken to a diversion of such savings to meet urgent needs as they arise.

In only three instances during the past seven years has the total actual expenditure (including supplementary votes) exceeded the estimated expenditure; in two of these the excess was little more

than Rs. 100,000, and in no case has the estimate been exceeded by more than Rs. 250,000. I contend that these facts conclusively dispose of the suggestion that there is a constant and wasteful excess of expenditure over estimates.

There is one feature in the returns of expenditure to which I should like to draw your special attention, namely, the cost of administration. I do not think that there can be much doubt that we have witnessed during the last eight years a sustained activity in every branch of the Public Service which has rarely been equalled and certainly never exceeded in any previous period. In almost every department there has been a rapid expansion, and in order to keep pace with this healthy development we have had to overhaul our machinery: for expansion without efficiency would have profited us little, and in order to cope efficiently not only with the ordinary increase in work, but also with new difficulties and new problems, very considerable additions to the administrative staff have been imperative. And yet, I am glad to say that notwithstanding the marked development in every direction during the past eight years, and the additional machinery which that development has entailed, the cost of administering this Colony so far from increasing has actually decreased. I do not, of course, mean that the actual amount is less, but that the percentage of your expenditure on administration to-day is less than the percentage in 1895. Let me give you the figures. In 1895 out of your total expenditure of Rs. 21,151,619 the cost of administration accounted for Rs. 5,745,181, or over 27 per cent. In 1902 your total expenditure was Rs. 26,341,878, and the cost of administration Rs. 6,790,009, or under 26 per cent. The actual expenditure has increased by Rs. 1,044,828: the gross increase was Rs. 1,816,456; but from this has to be deducted Rs. 271,629 representing various economies which have been effected in the course of re-organizing the several departments. As might be expected, the greater part of the increase, viz., Rs. 981,106, is due to new appointments: permanent increases of pay account for Rs. 304,657, and temporary increases, such as personal allowances, &c., for Rs. 30,693. As regards the increase due to new appointments, however, I should explain that nearly Rs. 200,000 is paid to the new department of Irrigation, which did not exist in 1895. The ordinary departments of Government are responsible for the following amounts, which

in every case, except the Civil Service, represent additional staff and in most instances increased pay: Railway Rs. 283,763, Post Office Rs. 183,519, Education Rs. 80,662, Police Rs. 66,232, Port and Marine Rs. 67,543, Public Works Department Rs. 47,255, Civil Service Rs. 41,268, Secretariat Rs. 32,087, Supreme Court Rs. 28,037, and Medical Department Rs. 27,082. The total strength of the administration has risen from 8,096 in 1895, to 9,115 in 1902. Of the additional 1,019, 57 are officers drawing a salary of Rs. 3,000 or more, an increase in the supervising staff which I do not think can be called excessive. The most striking increase in staff has taken place in the Post and Telegraph Department, the strength of which has risen by nearly 300, including four superior officers. As I shall have occasion to show you presently, there has been remarkable development in every branch of the Post Office, while there is no doubt that for some time it had been under-manned, more specially in its supervising staff. The Railway staff has increased from 647 to 690, the Educational from 733 to 825, and the Police from 1,712 to 1,855. For further details I must ask you to refer to the report of the Auditor-General.

PUBLIC DEBT.

I now come to the public debt, a factor of the greatest importance in an estimate of our financial position. It will be convenient and, I hope, not uninteresting if I briefly summarize the particulars of your indebtedness since you first began to raise money on loan.

Since 1875, when the first loan for harbour improvements was raised, you have borrowed £5,166,000 in sterling and Rs. 3,365,000 in local currency, or, converting the latter into sterling at 1s. 4½d. to the rupee, a total amount of £5,391,209. This sum has, roughly speaking, been appropriated as follows: Harbour Works £1,945,455 (Rs. 29,181,825), Railways £2,874,901 (Rs. 43,123,515), Water-works £369,817 (Rs. 5,548,755), and Irrigation £200,936 (Rs. 3,014,040). Of these amounts there are still due on account of Harbour Works £1,715,465 (Rs. 25,731,975), Railway Construction £2,726,000 (Rs. 40,890,000), Waterworks £345,617 (Rs. 5,184,255), and Irrigation £199,596 (Rs. 2,858,940).

The present annual charges on the debt in interest and sinking fund amount to Rs. 3,653,097, as compared with Rs. 3,140,000 in 1895, the increase of course being due to the loan raised last year. I may remind the Council, as I did in my opening address in 1896,

that the lion's share of these charges is borne by the railway. The amount due for railway loans is Rs. 1,832,667, and in 1902 our railway not only brought in sufficient to pay this sum, but yielded an additional profit of Rs. 1,235,738, leaving only Rs. 584,692 out of the total Rs. 3,653,097 to be met from general revenue. As to this amount, I may quote once more from the Auditor-General's report: "If the new railway extensions are only moderately successful, they will produce a surplus sufficient to meet this small deficit, and practically relieve the revenue of the whole burden of the loans, both immediately and ultimately. The increased accommodation which will be provided by the completion of the Northern Arm of the Break-water cannot fail to produce an enhanced revenue from that source also, while the increased price of land and the advance of general prosperity among the people will soon place irrigation expenditure among the most remunerative of our investments."

Your present debt amounts, as I have said, to Rs. 74,374,624, or in sterling £4,977,678. In other words, your debt is about two and three-quarter times your revenue, and in this respect it compares, as it did in 1896, very favourably with other colonies. For instance, taking the figures for 1901, the debt of the Australian Commonwealth is about seven times the revenue; of New Zealand more than eight times the revenue; of Canada nearly seven times the revenue; and of Natal about three and a half times the revenue. If we gauge our indebtedness by the standard of amount per head of population, our position appears to be still more favourable. Our debt works out to about £1 8s. per head, as contrasted with £54 11s. in Australia, £68 10s. in New Zealand, £13 11s. in Canada, £11 7s. in Natal, £13 7s. in Cape Colony, £4 10s. in Jamaica, and so on.

There is still one more question in connection with the public debt to which I desire to refer, and it is one of considerable practical interest: when will it be finally extinguished? In answering this question it will, of course, be understood that I refer to the present debt alone, and do not take any account of new loans which it may be necessary to raise in order to complete the sanctioned railway and harbour works. The Auditor-General informs me that the amount of Rs. 74,374,642 will be diminished by nearly Rs. 80,000,000 by 1934, while it should be totally extinguished by the year 1948. "It will thus be seen," Mr. Ellis pertinently remarks, "that very many persons who are now twenty years of age and under will live

to see the final repayment of all sums now owed by the Colony, while they will probably within the next five years enjoy the advantages which the great works now in course of completion must confer upon the Island."

PRESENT FINANCIAL POSITION.

During my visit to England in 1899 I placed before the Secretary of State the wants of the Colony, and after carefully considering our financial position and prospects Mr. Chamberlain sanctioned a very extensive scheme of railway and irrigation. This included the construction of the railways indicated in the programme of railway extension which I placed before you in 1896, namely, railways to the north of the Island, in the Kelani Valley, and in the hill districts of Uda Pussellawa. He also sanctioned the expenditure of five millions of rupees, to be spread over a period of years, on irrigation works. The total cost of these great works was estimated at Rs. 20,640,000, and the Secretary of State directed that a moiety should be raised by loan, and the remainder met out of invested and future savings of revenue.

We have found and paid the moiety of Rs. 10,320,000 to be paid out of surplus revenue, and accordingly the mortgage has been redeemed, and the surplus revenue is no longer hypothecated on this account.

Has this payment exhausted your reserve fund—your surplus balances? Not at all. It is estimated that after meeting an expenditure this year from surplus balances of over Rs. 820,000, principally on account of Railway feeder roads, your assets on 31st December next will exceed your liabilities by more than Rs. 4,000,000.

These are your assets: and what are your liabilities? In order to deal with them it is necessary to remind you of the objects of the loan of 1902, and the use which has been made of the funds thus placed at our disposal.

In a despatch to the Secretary of State dated 13th July, 1900, I stated our immediate liabilities, including the balance required to complete the harbour works under construction, the Northern, Kelani Valley, and Uda Pussellawa railways, and also the sum of five millions on account of irrigation works, to amount to Rs. 29,700,800, or, after deducting the contribution of Rs. 10,320,000 from revenue, Rs. 19,380,800.

A loan of £1,400,000 was accordingly raised, and it realized

in local currency Rs. 19,829,116. Of this loan, there remained on 31 July last a balance of Rs. 3,845,531, which was earmarked as follows: For railway construction, Rs. 926,748; irrigation works, Rs. 2,391,314; quarters for railway employees, Rs. 527,469; total, Rs. 3,845,531.

But this allotment of funds will not suffice to finish the works now under construction. The chief amounts required are estimated to be Rs. 2,447,277 on account of new railways, Rs. 5,700,000 for the completion of the harbour works now under construction, Rs. 2,391,314 for irrigation works, and Rs. 2,000,000 for the duplication of the water main. It is not anticipated that the original estimate for the harbour works will be exceeded, but you have sanctioned many new and important additions since the estimate was framed. As I will explain under the head of "Railway Extension," we have not been equally fortunate as regards our estimated expenditure upon new railways, and there will be at least an excess expenditure of Rs. 1,500,000. I estimate your total expenditure during the next three years (including the last five months of the current year) on works already sanctioned to be as follows:—

Service.	1903. Rs.	1904. Rs.	1905. Rs.	1906. Rs.
Harbour ...	1,000,000	2,000,000	2,000,000	700,000
Railway ...	926,748	1,520,529	—	—
Irrigation ...	747,045	1,100,000	544,269	—
Duplication of water main ...	800,000	1,200,000	—	—
Quarters for railway guards ...	100,000	150,000	150,000	127,466
Kadugannawa ineline tunnels...		265,000	70,000	—
Railway feeder roads ...		361,780		
New offices for Public Works Department ...		50,000	75,000	—
	<u>Rs. 3,573,793</u>	<u>Rs. 6,647,309</u>	<u>Rs. 2,839,269</u>	<u>Rs. 827,469</u>

A total amount of Rs. 13,887,840 will thus be required before the end of 1906 in order to complete projects which have been already sanctioned.

To meet this expenditure you have the balance of the loan of 1902, Rs. 3,845,531, and your surplus balances (as estimated), Rs. 4,200,000; total Rs. 8,045,531. Accordingly, a loan would seem ~~to be~~ eventually required. I hope not. If you have in 1904, 1905

and 1906 the average surplus of the last seven years, about 1½ million, and if, as we have reason to hope, there will be an annual succession of pearl fisheries, you may find yourselves in a position altogether to dispense with a future loan when all these great works have been completed and the expenditure upon them is at an end. But meantime, at the end of 1904, during which year your expenditure will be abnormally large—indeed nearly double the aggregate expenditure of 1905 and 1906—your surplus balances and the balance of the loan of 1902 may both be exhausted. You may then think it desirable to raise another loan; probably you will be greatly influenced in your decision by the condition of the money market, but it will not be necessary for you to borrow unless you can do so on favourable terms. For you have invested in Indian and other securities Rs. 6,037,206, which mostly consist of deposits and moneys held in trust by Government; for instance, the Widows' and Orphans' Fund. The interest which you receive for these investments amounts to Rs. 211,249, and you would have to pay in charges for interest and sinking fund Rs. 241,488 if you raised a loan of the same amount.

Consequently, it will be sounder finance, until your invested funds are exhausted, to obtain the amount required by borrowing on or by realizing your securities than by raising a loan. This was the course which we recently pursued, and the amount advanced, was repaid to cash balances when the loan of 1902 was raised. If this course is adopted, it probably will not be necessary for you to raise a fresh loan for another five years, and even then, as I have stated, a loan may not be required if the surplus revenue and the proceeds of pearl fisheries have replenished the coffers of your surplus balances.

I am, however, assuming that you will in the meantime contract no further obligations and incur no fresh liabilities. This would involve your halting, or at least marking time, in the path of progress, and adopting a policy of stagnation which would scarcely be justifiable if your prosperity continues. Under the head of "Irrigation," there will remain much to be done. Railway extension is surely to be prosecuted. Under the head of "Railways" I will indicate to you some of the wants of the future, notably the railway to the north of Mannar, with the view of meeting the Indian extension to Paumben, the extension of the Kelani Valley

railway to Ratnapura, which will almost certainly, be undertaken, and the railway from Colombo to Negombo, Chilaw, and Puttalam. The cost of these three railways would probably amount to nearly Rs. 14,000,000. Then it is possible that in the not remote future you may undertake the construction of the wet dock and inner harbour, of which the survey has just been made, and of which the cost has been very roughly estimated at Rs. 8,000,000. You may further consider it desirable to adopt Mr. Mansergh's scheme (probably in a modified form) for flood outlets, and you will almost certainly find it necessary to make provision for a new Central Railway Station for Colombo.

I am far from advising that all these important works should be undertaken at the present time, or simultaneously at any time. But if you decide on prosecuting any of them, I believe that it will be more economical to borrow the money and do the work quickly than to attempt slow construction by annual doles from revenue.

We should also bear in mind that we have engaged to guarantee and raise a loan of Rs. 3,000,000 for the Colombo Municipality, in order to enable them to meet the cost of the drainage scheme now under construction.

I have now placed before you as concisely and precisely as I can the condition of your finances. Finance is the corner stone of your prosperity, the foundation of all sound administration; and if it has not been well and truly laid, then the superstructure, however imposing in appearance, is unstable and sure to fall in the day of storm and stress. I hope, that you are satisfied that the future of this Colony rests upon the bed-rock of sound finance.

CURRENCY.

It is interesting to note the fluctuations which have taken place in the currency note circulation and the coin reserve during the last seven or eight years. Dealing first with the note circulation, I find that at the date of my assumption of office the circulation stood at Rs. 9705,000. After dwindling to Rs. 7,365,000 in May 1896, it rose steadily in the following years, and on 5th January, 1900, reached Rs. 147,02,450. Thereafter it again decreased, though not to the former figures, the average monthly circulation for 1901 and 1902 being Rs. 11,831,200 and Rs. 11,748,300 res-

pectively. This year the record has been broken, the circulation on 24th October being Rs. 17,737,090. The statistics of the coin reserve necessarily reveal corresponding fluctuations, the present amount (November, 1903) being Rs. 8,717,809, as against Rs. 5,089,897 in 1896. But, whereas the reserve of 1896 was all in rupees, the present day reserve consists both of gold and silver, Rs. 7,164,510 (equivalent to £477,632) of the Rs. 8,717,809 being in sovereigns.

TRADE.

The trade of the Colony has made rapid strides since the year when I first arrived in the Colony, and the returns of the Customs Department are very striking. In the year 1896 the total revenue collected by the department amounted to Rs. 5,550,000. In 1902 it had risen to Rs. 7,630,000, an increase of some 38 per cent. The value of the exports and imports of the Colony, excluding specie, rose from 1,624 lacs of rupees in 1896 to over 2,086 lacs in 1902 or about 30 per cent. Ten years ago the value was little more than half this amount. It is interesting to note that the trade of Ceylon is now about one-tenth that of India, though our population is only about one eighteenth of that country. The highest point touched in the value of exports during the seven years was in 1899, when they reached 1,114 lacs. Next in order comes last year, when our exports were valued at 1,107 lacs. The figures of 1899 were due to the inflated price of plumbago. In that year the value of this article was nearly 120 lacs of rupees in excess of the figures for 1902, owing to the price per ton being nearly double what it was last year. Imports reached their highest figure in 1900, and the total value of the trade of the Colony also rose to its culminating point in that year, though the exports were less in value than in 1899 and 1902. The imports of cotton goods, grain, and metals were exceptionally heavy in 1900, and to these three classes of goods is due of the fact that this was the record year of the seven.

Turning now to some of our exports and imports in detail, the article that has, of course, paramount claim on our attention is tea, but this our staple product, the foundation of our prosperity, deserves the full and separate notice which I will give to it later in this review.

When we reflect on the obligations of the Colony to this great

industry, the question naturally arises, Are we now wholly dependent on the tea industry? Would ruin necessarily overtake the Colony if—which God forbid—tea were to perish? This is a wide question—a question which seriously affects our credit in the money market, and by the decision arrived at the policy of progress and development—to a great extent with borrowed money—must stand or fall. In 1898 the question was raised in an acute form, for many men of light and leading contended that, in view of a depression in the tea industry which possibly might deepen and become chronic, we were not justified in embarking on a large expenditure in public works. Some of my Councillors took this view, and questioned the wisdom of a progressive policy under conditions so unfavourable. The situation was critical, for if the Secretary of State had accepted these cautious views progress must have been checked, and the Colony would have had to stand still or mark time, as in the years 1877-1883.

Tea still holds, and I hope will long continue to hold, the pre-eminent position in our exports. It shows no sign of decay, but rather of increasing vitality. The total export of tea has arisen from 110,095,000 lb. in 1896 to 150,829,000 lb. in 1902, the increase in value being from Rs. 51,337,388 in 1896 to Rs. 54,298,694 in 1902. The export of tea has thus increased nearly 40 per cent. in quantity, and, in spite of lower prices, 6 per cent. in value. But—and this is the point I desire to emphasize—other Ceylon products have advanced in still greater proportion. Thus, in 1896 the total value of all exports of Ceylon produce was Rs. 76,275,472, two-thirds of which was represented by tea: last year the total value of exports of Ceylon produce was Rs. 96,771,467 to which tea contributed Rs. 54,300,000, or only 56 per cent., the value of "other articles," being now Rs. 42,472,773, as against Rs. 24,938,084 in 1896. In other words, while the value of tea exports has risen 6 per cent., the value of "other articles" exported has risen more than 65 per cent., and whereas eight years ago tea formed about two-thirds, it now forms little more than half of your exports. Even this does not fully indicate the rapid expansion and development of your general trade. In 1902 the exports, other than tea exceeded the *total* exports from 1890, when tea was already a firmly established export and formed 44 per cent. of the exports.

I have told you that the value of tea exported has risen about 6 per cent. during the years of my administration. Compare with this the increases in other directions. The produce of the cocoanut palm shipped to other countries has increased 86 per cent., cinnamon 90 per cent., cacao 130 per cent., while plumbago has advanced over 200 per cent. It is especially gratifying to note a marked increase in the values of the various articles produced from the cocoanut palm. In 1896 the figures were Rs. 11,178,000, and, with the exception of a slight falling off in 1899, each year has seen an increase over the figures of the preceding year. In 1902 the value had risen to nearly Rs. 21,000,000. The articles which chiefly contributed to this large amount are cocoanut oil (Rs. 10,000,000), copperah (Rs. 4,000,000), desiccated cocoanuts (Rs. 2,900,000), and poonac (Rs. 1,300,000). I may remind you that the last two articles are comparatively new, desiccated cocoanuts—so largely in request for confectionery—being an unknown product twenty years ago. It is instructive to note also that the exports of these two articles alone are equal in value to the total exports of the products of the cocoanut palm in 1882. The most marked advance since 1896 has been in the export of copperah, which has increased in value more than seven-fold, *i.e.*, from $5\frac{1}{2}$ lacs to 40 lacs of rupees. and in quantity from 57,500 cwt. to 377,000 cwt. Cocoanut oil has risen from 60 to 100 lacs, and the value of poonac exported has increased more than 100 per cent., reaching 12 lacs in 1902. Coir fibre has risen from $2\frac{1}{2}$ lacs in 1895 to over $7\frac{1}{2}$ in 1902 and the exports of desiccated cocoanuts also showed a substantial advance.

The important position which these products of the cocoanuts palm now occupy in our trade returns may be gauged from the fact that, whereas in 1896 they formed only about $14\frac{1}{4}$ per cent., they now represent nearly 22 per cent. of the total exports of Ceylon produce. Again, while the area under tea cultivation is about 386,000 acres, the area under cocoanut palm cultivation is estimated to be at least 650,000 acres.

I think, you will admit that the figures I have quoted, more especially with regard to cocoanut produce and plumbago, sufficiently support my contention that Ceylon is fast becoming less and less dependent on one staple, and when I come to deal with the Botanic Gardens Department I shall have a further

opportunity of acquainting you with the vigorous and successful efforts which have been, and are still being, made to introduce the cultivation of new products. The issue of these efforts in the future will greatly depend on the earnest co-operation of the planter and the Government. If the planters of Ceylon continue to display that unflagging energy and that courageous enterprise which have so distinguished them in repeated periods of depression in the past, I am confident that they will find the Government for its part always ready to meet them with sympathetic consideration and practical assistance.

The Principal Collector of Customs, in his review of the trade of the Island for the year 1902, draws attention to some points in connection with certain imports which figure largely in the returns, which are well worth consideration. He points out, for example, that it is not altogether satisfactory that the Colony should have to import so much fish—the value was 38½ lacs in 1902—when our waters are swarming with them. Again, there seems room for local enterprise in the production of curry stuffs, the value of these articles now imported being about 15 lacs annually. On the other hand, the beer locally manufactured in Nuwara Eliya appears to be improving in quality, and the consumption of it is on the increase. The import of sugar steadily increases, and it is worthy of note that while the imports from the bounty-giving countries have risen rapidly each year, the Indian trade has gradually declined.

IMPROVEMENTS IN THE PORT OF COLOMBO.

The creation of a Port Trust is sometimes advocated, but I adhere to the opinion which I have more than once expressed that a period of transition like the present is not a favourable opportunity for attempting the introduction of a totally different system; but when the period of transition is over, when the harbour is completed, when its finances are placed upon a sound and stable footing, then the question of a Port Trust should have favourable consideration. In the meantime the Harbour Board is a good substitute, for its constitution is much the same as that of the proposed Port Trust, and its power for good or bad not much less.

REVIEW OF BOOKS.

General Report on the Public Instruction in Bengal for 1902-1903—Printed at the Bengal Secretariat Press.

The year under review has witnessed a thorough change in the Education Department of Bengal. Improvements and reforms have been introduced in several sections of educational work. The new scheme of vernacular education in Primary and Secondary schools has been taken in hand as an experimental measure. The old system of payment of money grants to aided institutions by 'results' has been changed to a stipendiary system modified by the results of systematic inspection. Female education has received an impetus by the opening of model girls' schools in various districts and the extension of 'Zenana Education System.' The total number of institutions has increased by 2.9 per cent and the total number of pupils by 5.2 per cent. In the report is embodied a comparative table showing the results of the University Examinations for the past 6 years. The result of the Entrance Examination has been steadily deteriorating since 1900-1901. With a view to improve the management of our public and private schools orders have been issued by Government for the formation in Bengal, of a system of school Committees similar to those formed in the Central Provinces for schools of different classes. A short synopsis of the 'Zenana Education Scheme' as formulated by Government in accordance with the recommendations of the conference of experienced educational officers held during the year under review, will, we hope, be interesting, to the public.

This scheme contemplated (1) that zenana education should be based on a system acceptable to Native society, and be imparted through books of wholesome tendency, embodying Hindu and Mahamadan traditions; (2) that, in populous villages, small committees should be formed, to which respectable members of the orthodox classes of Hindus and Muhammadans should be appointed;

and (3) that female teachers working under the orders of these committees, should be appointed to teach zenana ladies in villages. Since the close of the year, these proposals have been approved, as an experimental measure, by the Lieutenant-Governor, and some progress has already been made in giving effect to them at selected places in the Province. Another noticeable feature in the history of education in the Province during the past year was the opening of "Continuation Schools" in accordance with the wishes of the Government of India. The object of these schools is to enable students to complete their education in branches of study which may either have been neglected or not attempted by them.

These schools, under proper management and strict supervision will, we think, prove very useful. The subject of establishment of hostels, the importance of which cannot be over-estimated, will be separately considered by Government. We regret to learn that some of the rich municipalities do not make a more adequate provision in view of the increasing demands of Primary education upon their resources.

Texts about Budh Gaya and Buddha—printed by Sanyal & Co. at the Bharat Mihir press, 20, Roy Bagan Street, and published by Mazumdar Library, 20, Cornwallis Street, Calcutta.

We have received the above book together with 2 printed booklets in which all the facts of the Mahabodhi Temple case, as it now stands, and an account of His Excellency the Viceroy's visit to Gaya have been stated. From time immemorial 'Budh Gaya' has been regarded as a Hindu Shrine and Hindus from all parts of the country flock to the place to offer *pinda* at the feet of the Mahabodhi tree. The Government, the Buddhist priests and all other parties concerned cannot deny the above undoubted facts. To speak the truth, all have acknowledged the uninterrupted hereditary possession of the Mohants. The Buddhists are always welcomed to the place and have facilities afforded to them for their worship and up to the present day no complaints have been made against the Mohants by any pilgrim, Hindu or Buddhist. Criminal prosecution alluded to in the note was initiated by Dharmapala for no fault of the Mohant's men who simply maintained their rights and the former from doing what was to them an act of

sacrilege. The High Court decision, however, put matters right by honourably acquitting the Mohant's men and declaring their action as strictly legal. Apart from the legality of the question, we must honestly confess that we see no necessity of the proposed transfer.

We have full confidence in the non-interference policy of our benevolent Government and the letters of the high officials quoted in the pamphlet fully justify our conviction. We hope the Government will not break the pledge so repeatedly given to the Hindu Community at large through the Mohants, on any consideration. Any interference with the present arrangements will unnecessarily wound the religious feelings of the Hindus which is quite against the humane policy of the Government. The texts clearly establish the fact that Budh Gaya is a Hindu shrine and that Hindu Mohants have been in uninterrupted possession of it. Apt quotations from the Hindu sacred books justify the present situation of the mohants who have law, usage, tradition and religious sanction on their side.

Travancore Almanac for 1904—published by order of His Highness the Moharajah of Travancore—printed at the Travancore Government Press, Trivendrum.

This useful volume not only serves the purposes of a Civil List and Official Calender for 1904 but contains much valuable information regarding various important state affairs and matters of general interest to the public. It is in short, a Directory of the State of Travancore. A careful perusal will not only give us an insight into the mode of government in vogue in the country but will also enlighten us on the social and intellectual progress achieved by the people of Travancore. In addition to the detailed particulars of all Government offices and the municipal administration of the province, the important rules and regulations as to leave, appointment, etc. have been printed. Particulars of literary clubs, mutual benefit societies, inland trade, commerce, Memoranda by the British Resident, Meteorological Tables, Postal information etc., have been given.

From the list of high officials, we find that a large number of well-educated Indian gentlemen (mostly graduates) hold responsible positions of trust under the Government and materially help in

carrying on the administration of the country. The number of literary clubs and newspapers is very large and clearly shows that the Travancore public encourages and appreciates literary taste.

The Education department here is very efficient and the work of teaching is practically carried on by a staff of teachers properly trained for the purpose in institutions founded and maintained by the State. Besides the State College and Schools, there are lecture committees organized at the expense of the Government. The Trivendrum lecture Committee instituted in 1887 arrange for about 20 lectures in English and 6 in Malayan and Tamil to be delivered in the Jubilee Town Hall. The subjects comprise Sanitation, Agriculture, History, Literature, Physiology, Geology, Astronomy, Botany, Electricity, General Philosophy and Science. A sum of two thousand rupees a year is sanctioned by Government to be awarded as honoraria to the lecturers in sums varying from Rs. 50 to 100 according to the discretion of the Committee. To encourage the diffusion of useful knowledge among the masses, a further grant is made to the lecturers for the publication and distribution of copies of such lectures as are specially selected for that purpose by the Committee. Female education receives the consideration it deserves from the Travancore Government. There are the Maharajah's College and High Schools for girls to teach English, Physiography, Physiology, Mathematics Malayan and Tamil. Industrial schools of Art and Agriculture are also endowed by the State. The present Dewan Bahadur (so far as we have been able to judge from the official circulars issued by him) seems to be a man of intellect a skilful organizer and unsparing in his efforts to improve the efficiency of the various departments under his charge. We cannot conclude this review of the Almanac without mentioning the important feature of Travancore Government service, *viz.*, 'State Life Insurance' whereby facilities are afforded to all government servants to make ample provision for their helpless dependants.

In fact the Government compels all its servants (in the permanent establishment) to insure their lives. There are many things to admire in the humane Government of Travancore.

*Notes on Education in India—by Devander Nath Chakrabutty—
Printed at the Calcutta Press, 29, Musjidbaree Street.*

This pamphlet is a reprint of a letter which appeared in the *Indian Mirror* of the 20th December 1901 with a few emendations. The author criticises the Viceroy's speech at the Educational conference and the new scheme of education in Higher class English Schools introduced by the Director of Public Instruction. With regard to the latter point he quotes the opinions of both the Anglo-Indian and Indian press which unanimously protest against the new scheme of Mr. Pedlar and consider the policy of forcing on the people of India an education in their own vernacular when they are clamouring to be taught English 'to be retrograde and unstatesmanlike.' In connection with his criticism of the Viceroy's speech at the Educational conference he very ably brings to bear upon a few apt quotations and remarks on the following points.

(1) Reduction of the value of Government scholarships
(2) Sanskrit Education (3) The University Commission's report
(4) Rules for the affiliation of Colleges, &c., &c., &c. References have also been made to the Hon'ble Justice Banerjee's famous note of dissent—Report of Lord Ripon's Education commission—Sir Charles Trevelyan's minute on Indian Education—The Queen's Proclamation—of 1858.

The Mining Journal and Railway and Commercial Gazette—Printed for the Registered Proprietors by the Printing and Advertising Company, Limited, 121, Fleet Street, in the Parish of St. Bride, in the City of London.

The journal before us is unique in point of information supplied and subjects treated. The article on 'Electric Winding Engines'—a paper read before the Institution of Electrical Engineers (Glasgow Local Section) that appeared in its issue of March 19, 1904, is instructive and scientific. The mining information given of the different parts of the world is really worth reading. The Journal is really a *desideratum*. We commend it strongly to our readers to whom the varied information supplied as to the interesting subjects treated will open up new veins of thought and engender a taste for Mining, Electricity, Metallurgy, Geology, &c.

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THE
NATIONAL MAGAZINE.

NEW SERIES.

NO. 4.—APRIL, 1904.

FRENCH TRADE NOTES.

The commercial weakness of France is just now an engaging topic, and one which no one can afford to pass over lightly. Painful as the fact is, the French commercial world at last admit that they have, and are still losing ground in foreign markets in competition with other nations. This is particularly the case as regards London. Want of energy on the part of manufacturers who as usual expect too much from Government, and display too little self-help, is the principal cause of this regrettable state of affairs. No one perhaps has devoted so much study and time to this important question as M. Raoul Fouché, one of the most distinguished members of La Société des Agriculteurs de France. That gentleman affirms that the difficulty can be overcome in due course, provided Frenchmen trade as do British tradesmen; present competition must be fought on modern lines. M. Fouché rightly condemns the actual business-methods of his countrymen, and asserts that so long as they persist in clinging to them, it is absolutely impossible for them to make headway. Is France properly prepared for competition? The majority reply in the negative. Let the French commercial classes of to-day turn to Belgium, Germany, Russia, Norway, and Denmark and see how these typical nations carry on business. They are all more or less successful because they are up-to-date; this cannot be said of France. The latter has still to increase the speed of her land and sea transports in a more general way, and to bring about

a reduction in freight. In this respect other countries triumph, and surpass struggling France.

M. de Loverdo's report is a significant document; not satisfied with reading articles on the commercial decline of his country, he himself undertook a trip to London, for the purpose of verifying facts. He arrived at no rash conclusions, but visited the principal places of trade, talked with the "heads" right and left, and finally carried home his impressions. M. Loverdo who is as well-known in Paris as in London, and other large cosmopolitan cities in the world, is no alarmist, but a shrewd man of business. His writings on commercial subjects have won for him universal admiration. After his last visit to London, he entertained no longer any doubt that France was losing more and more her hold on the markets of that metropolis; she exported less butter, fewer eggs, apples, pears, &c., than formerly. So grave was the situation, in the opinion of M. deLoverdo, that there was indeed no time to lose, if French producers wished either to regain their position not only in London, but in various parts of the United Kingdom, or seek new outlets for her goods in the United-States, or even Russia. Senator Conteaux also wrote a great deal on the commercial resources of France, but erred on the side of being too hopeful. Had he gone deeper into the question, and made more exhaustive researches as did M. deLoverdo, he would not have avoided the bitter contradictions and criticisms of others better informed than himself. M. Conteaux allowed himself to be carried away by patriotism—a common weakness with most Frenchmen—instead of recording plain facts, however unpleasant they were. This task fell to M. deLoverdo, whose comprehensive report must have opened the eyes of his countrymen.

M. Fonché vouches for the accuracy of M. deLoverdo's observations, and adds that not only is France losing her commercial hold on British markets, but also on several others. The demand for Italian and Spanish wines is increasing more and more every day; the same remark applies to Danish butter, eggs, fruits, and manufactured goods from neighbouring countries. Where does France come in? Something must be done at once, before it is too late. M. de Loverdo and others are working diligently in this direction. They would not be doing their duty as citizens, were they to hold back the truth, and throw dust into the eyes of their

countrymen. They began by representing facts as they were, and will continue to do so, whether cheerful or gloomy. France for many years committed a great mistake by concluding that England could not exist without her imports; time has since proved different. She finds fault with England for importing enormous quantities of merchandise from the Continent, storing them at certain depots, and afterwards distributing them as "British goods." So long as continental sellers are paid for the goods, it matters not to them, what becomes of their merchandise.

M. de Loverdo does not attach so much importance to this mode of trading as to the fact that French agriculturists and manufactures still charge too much; by being so exorbitant, they only increase the chances of Belgium and Germany to outstrip her in the European markets. This is where commercial France is to blame, and why she finds so few demands for her articles. The French must henceforth devote more time than they have hitherto done in seeking helpful business information, as to the most profitable markets abroad. The Government does all it can, by offering assistance in this direction, but cannot be expected to continue doing so, if it finds that those, who ought to be interested, manifest no eagerness to profit thereby.

The French commercial world has been classified into two sections; those that are desirous of success, and others that are partly ignorant and obstinate, who refuse to make efforts, unless "large orders" drop down on office-tables from the clouds. M. de Loverdo sympathises as much with the first, as he deplores the tendencies of the second. Something might be done by way of affording greater facilities to those who are really in earnest to go "ahead" and proceed on modern lines of trading. There is a large section in France, who having seen their mistakes in the past, are only too anxious to copy the examples of England and Germany. Why not take this "portion" in hand without further delay, instead of waiting until the rest of the commercial section has been thoroughly reformed? Raise necessary funds, to be placed at the disposal at the "wide awake," for the purpose of trade development. Once they are able to report progress, others may follow in their footsteps.

The work accomplished by M. de Loverdo, solely in the interests of his country, has been invaluable; the only recompense

he asks for, is for his counsels to be followed, and his ideas carried out not at lightning speed, which would spell ruin, but on the contrary, slowly but surely. The Government has in M. de-Loverdo, an excellent supporter, who is only too willing to lend his helping hand in every possible way, and establish commercial enterprizes on a sounder footing.

E. C.

A WIFE'S DEVOTION WORKETH WONDERS.

CHAPTER I.

Vice lies always dormant in man,
A touch brings him under the ban.

The Akan forest is in the Central Provinces and infested with dacoits and wild beasts. People seldom pass through it. It was, therefore, surprising to find a young, beautiful woman, evidently reared up in the lap of luxury, wending her way across the forest. Her foot steps were unsteady and she appeared to be in pain. She stopped all of a sudden and going underneath the shade of a big *Sal* tree, laid herself down on the ground and was speedily wrapped up in sleep. In repose her countenance was by itself a study. Her complexion was surpassingly fair, her limbs were well-formed, the body was fairly developed and the face had an expression, which was quite angelic in character. Before she had given herself up to Nature's Sweet restorer—balmy sleep, she had shed tears, as traces of them were still perceptible in her eye—lashes which were still wet. Beauty, innocence and charm, were blended together and it was a rare sight to study the features and face, lit up, as they were, with a pleasant smile—the effect perhaps of a passing dream. Presently the sweet expression vanished, the face was distorted, sighs escaped from her heaving breast, she uttered something in pain and at last sat-up on the ground. Evidently, she had not, as yet been able to collect her thoughts, when the sound of footsteps roused her up and she sat in terror and trepidation. The new comer turned out to be a woman, but alas, such a woman, as even one of the sterner sex, could not cast eyes upon her without sad misgivings. The woman was ugly, the cast of her face was fiendish and her voice was just like a man's. She came up to the young woman and said with an ugly leer.

"What brings you up here, my beauty?"

"I have lost my way, and come up to the jungle."

"Lost your way you don't mean it, a beautiful woman has no

chance of escape from the arms of her lover. The ornament on your hand and the vermillion mark on your head proclaim you as a *Sadhava*, then how is it that you have left your husband to roam in a wilderness." The poor woman cried for some time and said. "I am in no way willing to answer your interrogatories. If you have any pity for the aggrieved, do show me the way out of the jungle.

"I'll shew you the way out of the jungle, if you like, but you sadly want food and repose. Come with me and I'll provide you with shelter."

The young woman got up and holding the other woman's hands said :—

"Have pity on a miserable being like me. I have suffered much and I want an asylum, where I would like to be alone, forgotten by the world. You are of my own sex and I feel no hesitation to go with you."

An hour's walk across the forest, brought them to its out skirts. Trudging wearily for some time, they came across a hut which stood midway between a village and the forest. The woman who was acting as guide was by birth a *Sontal* and her name was Balasi. She went to the hut and entered it by taking off the padlock which was on the door, by means of a key. The young woman followed her. The hut was neat and tidy and its secluded position was much liked by the new comer. Balasi by a show of kindness, obtained the good graces of the young lady, from whom she pumped out the following incidents of her life.—

"You will be surprized to learn, that I am the daughter of one Gurjati Rajah and the wife of another. I was married in my teens and came to my husband four years ago, when I was only thirteen years old. My young husband loved me fondly and I won the affection of my father-in-law and mother-in-law, both of whom, unfortunately for me, died within a couple of years after my marriage. My husband fell into the company of sycophants and bad characters and lost his saintly nature and character. He became a debauchee and his drunken orgies were the common talk of his subjects. He fully neglected me, but I patiently bore everything, till at last one night, he brought one of his mistresses into the palace, within the sacred precincts of the Zenana. He wanted me to bow down to the harlot. I refused to obey him

and gave him word of counsel like a truly devoted Hindu wife. Drink had maddened him and he was coward enough to abuse me in the vilest terms. He brought matters to a *coup* by kicking me and directing me to leave the palace forthwith. The insult offered in the presence of my hand-maidens so far upset me, that without bestowing any attention as to what the consequences would be, I left the palace through the back-door, vowing never to return to it on any consideration. That is the reason why you find me here."

During the narration, the Rani as we will now call her, shed a flood of tears. Balasi soothed her as best as she could and said.

"Raniji, your narration has affected me violently and I solemnly promise to aid and succour you to the best of my means. Live in this solitary hut as long as you like and command my poor services as often as you choose."

The Rani thanked her and Balasi went out on the pretext of bringing in food stuff. She went straight to the neighbouring village and halting before a large hut, bawled out. "Dunnia, Dunnia," somebody from inside answered "I am coming." Presently a tall, youngman apparently of the age of five and twenty came out and met Balasi. He was hale and hearty and possessed much strength, as his well-knit, figure and muscular body showed. Hailing Balasi he said.

"What brings you here at this hour of the day?"

"I 've come, wishing to be of some service to you."

"A service to me, what do you mean?"

"When Dana jilted you for the wicked Etmari, I promised to be on the look out for a beautiful woman I have got one now and I wish you to see her."

"Is she a virgin?"

"I don't think she is."

"In that case, I don't want her."

"Even if she be of ravishing beauty and descended from one of the best houses in this part of the country."

"I am determined not to marry one, who is not a virgin."

"Who wants you to marry her."

"Tempt me not thus, you vile woman."

"But for all that, just have a look and then you can discard her."

"Go on then and I'll follow you.

Balasi took Dunnia to an adjoining *hat* and putting fruits and eatables in his hand said—"You must be my porter for the time being, carry this load and I will take you to a place, where dwells this ideal beauty" Dunnia carried the load and followed Balasi to her hut, where the young Rani was sleeping innocently—Her fatal beauty at once captivated Dunnia and he succumbed to the dictates of the flesh. His good resolutions vanished and the moral precepts, according to which, he had always acted, failed to restrain him at the critical moment. He fell in with the advice of the bad woman and after conversing with her for some time *sotto* voice, quickly departed.

CHAPTER II.

I will take you to life and light
In heaven free from strife and fight,

It was midnight. The poor Rani was sleeping soundly in her modest couch. A faint smile lit up her features, perhaps she was dreaming something pleasant, when a loud noise, like the yell of a tiger at bay, roused her and she sat up in bed in evident bewilderment and trepidation. She could not, for the life of her, make out, what the noise was and was on the point of calling out Balasi, when five men rushed into her room, with drawn swords. The leader of the gang addressed her in the following words—

"Lady, obey us in every respect and not a hair of your head will be touched. Resist us and your doom is sealed." Saying this, the man stopped, evidently wishing to scan the effect of his words. The Rani sat quiescent, not a muscle of her face moved, her eyes had a vacant expression, perhaps her mind was working upon scenes which were distant and remote. Finding her pre-occupied, the man in yet a louder tone said—"I ask you to follow me and if you refuse, I plainly say, you will receive condign punishment." This ominous admonition had no effect on the Rani, she was still listless, wandering in far-off scenes. Dunnia, it was he, who was talking to her, lost temper at her non-chalant attitude and was about to take hold of one of her arms, when somebody from the dark back-ground said—"Ruffian, touch her not, let not your polluted hands, besmeared with the blood of your innocent victims, come in contact with her sacred person,

disobey me and you will reap the consequences of your audacious sacrilege."

All eyes were turned towards the rear, when it was noticed, that a tall, old man, with a venerable appearance, was standing on the door-way. He was a *sadhu*, dressed in saffron-colored cloth, with a white flowing beard. His tone was commanding and he spoke with composure and dignity. On looking at him the miscreants were non-plussed and ill at ease. The notorious woman Balasi had already shewn a clean pair of heels and her companions followed suit. The *sadhu* did not care to check their ignominious flight. When every one was gone, he addressed the Rani and said—mother, this is not a fit place for you—come with me and I'll take you to a secure, secluded spot where we can confer as to what should be done, for the future."

The words were uttered in such a soothing tone, that the Rani, at once got up from her bed and fell at the feet of the *sadhu*. Gently raising her up by the hand, he said "mother, there is still danger ahead, let us leave this infernal place at once." Still holding her by the hand, he carried her out of the house and then the outlines of both of them, were lost, in the thick gloom, that pervaded the spot.

CHAPTER III.

When we are in a corner tight.
Reaction sets and makes us right.

The flight of the Rani was the theme of conversation all over the Gurjhat, people talked about it in whispers and the sensation, increased, when no news of her was forthcoming, emissaries ran about here and there, *Sowars* roamed all over the tract, sepoy's penetrated into and looked about the jungles and yet no trace of the Rani was found out. People thought, she had committed suicide and must be dead and the Rajah was rated soundly and came in for a round of abuse. The females of the palace cried themselves hoarse and the Rajah was at his wit's end. In his sober moments he cried and cursed himself and when he was the worse for liquor, he openly associated with women of ill fame and his carousals were severely commented upon both by the rich and poor. With beat of drums, he informed his subjects, that any body bringing news of the Rani, would be amply rewarded and

yet nobody could lift the dark veil enshrouding the good, young Rani, who for her good qualities, was liked by all. Her devotion to her husband was well-known and her beauty, years and innocence contributed to make her the moving spirit and goddess of the household. The Rajah paid no attention to business and his revenues were looted by a gang of unscrupulous men, who had managed to obtain his favor by fair means or foul, crime went up by leaps and bounds and organized dacoity became an institution of the land. The Dewan was an honest man of parts, but he was forced to a corner, on account of the machinations of dishonest-men, who stood round the Rajah. The poor Rajah had not the strength or fortitude to tide over his difficulties. He fell ill and his sickness took such a bad turn, that his physicians despaired his life. It was a sad sight to see the poor man tossing to and fro on his bed in high fever and in his delirious moments calling out to his Rani. In piteous accents he said—"my darling, my beautiful Nirana come to me, I'm burping, if I have you in my arms I'll cool down, have pity on me, do come to your husband, if I've in any way offended you, pardon me, I know your nature, you can't sit still, whilst I'm in pain, come to me, dear, where are you? come to me or else I'll die."

These words were uttered in frenzied, agonized tones and brought tears into the eyes of those who heard them. At last, the poor sufferer would fall down senseless and for a time, the sick chamber would be still. He would rouse up and go through the same way. Twenty-seven days had passed away and the disease had come to a climax. The palace was as silent as the grave and people in the sick chamber were, talking in whispers. The *Kabiraj mohashoy* feeling the pulse of the patient had said "the Rajah would pass away during the small hours of the morning. Nothing would save him, even if the great god Mahadev lent his aid." Anybody who had passed in vigil, before the ebbing life of a near and dear relative or friend, must know the thoughts and anxieties that group round the sick chamber at night which seem dark, tortuous and long, when the sands of life are falling fast. Every body was waiting for the fatal, trysting hour, when a *sadhu* accompanied by a figure which was muffled up from head to foot entered the chamber. He held a root on the nostrils of the patient and in the course of quarter of an hour he rallied,

opened his eyes and said "my God, blessed be thy name, I feel well, I'm thirsty, give me a glass of water." The muffled figure gave him the glass, when he said "Who are you, whose touch sends a thrill of joy to my heart you can't be my Rani, her touch was like this, who are you? For God's sake, tell me."

The muffled figure was heaving sigh after sigh and abruptly throwing down the covering revealed to the assembled people the face and features of the Rani. The Rajah at once clapped her in his bosom and shed tears of joy. Needless to say, that the Rajah was soon cured and the news of the return of the Rani spread like wild fire and a large concourse of people gathered round the palace, stouting at the top of their voices "Maharani ki jai."

CHAPTER IV.

However hard we may entwine,
Vengeance oh, my Lord ! is thine.

On his miraculous escape from the jaws of death and being united to his dear partner in life, the Rajah made up his mind to turn over a new leaf. He discarded wine and women, banished his sycophantic courtiers and was determined to walk in the ways of the Lord. Needless to say, that he created many enemies, who moved heaven and earth to procure his downfall. Baulked in thier attempts to injure him vitally, the conspirators had recourse to a *ruse*. Donning the uniform of raj sepoy, they set fire to a village, robbed the inhabitants and sent a representation to the British authorities, asking for redress, in the name of the afflicted subjects. A European officer held the enquiry and reported against the Raja, the result was, that a high officer of Government came to the palace and asked the Rajah to explain his conduct. The officer had his wife with him and both stayed for the time being, at the garden—house of the Rajah. The poor Rajah was on the horns of a dilemma and had no evidencē to prove his innocence. He was in sore straits and would not even take his meals. The Rani tried to soothe him by stating, that the machinations of his enemies would be disclosed and his honor would be fully maintained in the light of the day. The Rajah wanted to know, how the desired end could be secured, against such heavy odds. Enjoining her husband to be of good cheer, the Rani went away. On entering

her room, she muffled herself up in tight-fitting clothes and taking a maid-servant with her, hurried away from the palace. She went to the garden house and wanted to see the wife of the official. The lady complied with her request and wanted to know who she was and what was her errand. The Rani took off her veil and the astonished official's wife saw a face which was truly fascinating. Without any preamble, she said—"Good lady! I am the wife of the Rajah against whom so much has been said by a band of conspirators.

"These men fleeced the Rajah to their hearts' content. Their nefarious practices were found out and peremptorily stopped and they have banded themselves together to ruin the Rajah by casting a slur on his bright escutcheon. Lady! I intend taking you and your husband to a place from whence you would see and hear every thing and I dare say, the treasonable transactions of the miscreants would be brought to light. You will then know that my husband is innocent." These words were uttered in such a pleading tone, that the lady was evidently touched and asked "where they were all to go." The Rani replied "to a place close by." The lady went to her husband and after some conversation came together and they all left the place immediately after. It was night and pitchy dark outside. The maid went ahead and the rest followed her. A walk of nearly quarter of an hour, brought the party to the outskirts of the town. They espied a small, one-storied house and entered it. A man, standing with a lantern in his hands took them over to a room where a *sadhu* was seated on a tiger-skin. A lantern was burning and shed its feeble light within the room. The *sadhu* welcomed the visitors and bade them to enter a compartment, from whence they would be able to see and hear everything. The *sadhu*, we need hardly point out was the same man, who rescued the Rani from the clutches of the depraved and lascivious Sontals—From holes bored in the window the Rani as well as the European lady could see everything which may transpire in the Verandah. Anon five men appeared before the *sadhu* and bowed their heads to the ground. The *sadhu* pronounced words of *asirbad* and bade them to be seated. The spokesman—a tall dark man, with face pitted with small-pox and eyes which had a mischievous glare in them, said—"Sanyasi, we wish you to invoke and offer *pujah* to the nine

grahas (planets) and to recite the Sacred Chandi. We will pay you a couple of hundred rupees for your trouble.

"You must know, my children, that the purpose for which the *pujahs* and recitations are to be made must be divulged to me, otherwise you may not obtain what we pray for."

"We want to win our case before the authorities."

"What case? What is your object? Unless you make a clean breast of everything to me, I am afraid, it would not be in my power to help you."

The men talked amongst themselves in whisper and the spokesman then said—

"We have the fullest confidence in you and would not care to keep back anything. Please pay attention to what I say. The Rajah of the place has been our enemy and we want to throw him into hot water with a view to injure him, if not to demolish—him for good. With that object, we set fire to a village, pillaged the inhabitants and have gone up to the English authorities for redress. The Rajah submitted an explanation which was not satisfactory. A high official has come to investigate, record evidence and his report will make or mar the Rajah. We want to invoke the planetary powers and *Sakti* to befriend us and hence we have come to you. As a holy man of extraordinary powers, you are fully capable to work out the desired end."

"If I don't believe what you say, what will you do to convince me?"

"Here is a compact in Urya in which all the leaders of the movement have signed.—That will show, that we are in earnest and not hoodwinking you."

Saying that, he handed over the paper for the inspection of the *sadhu*, who after carefully reading it, folded it up and sewed it up within the bark of a certain tree, over which he sprinkled some vermillion and pasted sandal. He then said—"The invocation, *pujah*, *hom* (offerings to the fire) recitation and other auspicious transactions must be done, on the night of the full moon. The piece of paper which I have sewed up and in which your objects and aims have been clearly set forth, must also be offered up to the deities and I wish you all to be present, with a view to receive my benedictions."

The words of the *sadhu* highly pleased the party and they

promised to attend on that night in force. They one and all bowed low to the venerable man and quietly departed. As soon as they were gone, the lady and Rani came out from their hiding place the *sadhu* then said.

"My daughters, you have heard and seen all. I wish you now, lady, to explain everything to your husband, so that he and his men may be ready to pounce upon these villainous conspirators, who want to ruin the poor inoffensive Rajah. On the appointed night, a large concourse of people had assembled at the *Sadhu's* place. In the court-yard, preparations for the various ceremonies had been done. People were talking in whispers, when the *Sadhu* blew lustily a conch-shell. The sound had hardly ceased, when a strong body of Raj sepoy's accompanied by a posse of police constables seized the conspirators, who crest-fallen were safely conveyed to *Hajut*. They were duly punished and the Rajah was saved through the exertions of his peerless wife.

CHAPTER V. *

She played her part with such effect,
That none noticed nor saw a defect.

The Rajah and Rani had no offspring and the fact was a sore point with them. They offered *pujah* to the gods, but their supplication remained unheeded. One day as the Rani was seated in her garden, a maid-servant informed her, that an old *vairabi* wanted to see her. Permission being accorded, a tall, old woman, dressed in saffron-colored clothes and holding an iron trident in her, right hand appeared before her. The Rani bowed down her head reverentially and the old woman said—"May Hara-Parvati protect you. You are born in an auspicious moment and what the world call bliss, would always be your portion, but one circumstance troubles you and the Rajah. You've no son or daughter and an *antkura* (one with no children) is not blessed or the beloved of the gods. So, have a care "

"What can I do, Vairabiji it seems, we are doomed to have no children "

"Don't talk of a doom, I see you will be blessed with a son, who is destined to be the glory of your house. On my way hither, I have had a dream and if you pay heed to it, your heart's desire would be fulfilled " "Explain yourself Vairabiji, I'm all attention."

"Yester night I saw you in a dream. You were weeping, when Parvati in the disguise of an old woman came to you. She asked" what vexes you, my child, and makes you to shed tears? "You replied— "I am a *Banja* (one who has not at all conceived) and that fact distresses me" The goddess said "you have the remedy in your own hands, why don't you go and offer *Puja* to Hara-Parvati, in the temple that stands in one of your own Jungle mahels? A month after your *Puja*, you will conceive and in due time give birth to a son who is destined to be one of the greatest on earth." Carry out the command of the goddess and you will be blessed with a child, but do one thing, my dear Rani, go to the temple alone. Leaving your *Palki* and retinue a mile off the temple, you go there alone, don't be frightened. You are protected by the goddess and nobody would be able to do you any harm, go boldly, finish your *Puja* and come back blessed. Take care not to disclose your errand to any body. That must be kept a close secret. Are you prepared to act up to my suggestions" the Rani, without the least hesitation said she was. The *Vairabi* then said "as the 14th of the new moon would be an auspicious day, I wish you would render your homage and *Puja* on that day and again enjoining on the Rani, the utility of secrecy in such causes, left the garden, but not before she had said that she will pay a second visit to the Rani at no distant date.

The Rani was so much impressed with the words of the *Vairabi*, that she took immediate steps to carry out the behest of the strange woman.

CHAPTER VI.

To estrange them was their infamous role,
By parting them they thought to gain the goal.

The enemies of the Rajah, though foiled in their attempts to injure him, had not yet given up their game. They thought, that until the Rani was separated from her husband, they had no chance of success. The loving Rani kept a fond and sharp watch upon her husband and nothing could escape her eyes, rendered strong and keen by the holy impulse on her heart. They wanted to estrange the Rani first and then strike the Rajah. With that object, they came across a depraved Brahmin woman, who for a

stipulated price, agreed to do their bidding. Knowing the weakness of the Rani in the matter of possessing a child, they worked upon her superstition. The Brahmiu woman disguised as a Vairabi came to the Rani with a purpose, the nature of which, will unfold itself with the progress of the story. The Rani, without divulging anything to her lord and husband, quietly made the necessary arrangements and on the day (indicated by the so-called *vairabi* went out in a *palki* to the *jungle-mehal*. Her plans were unfolded to the Rajah and a sinister motive was attached to her innocent doings. There was in the palace a man known by the name of Daji. He was a sycophant by profession and known as the Court jester. By the virtue of his office, he took liberties with the Raja, with whom, he always talked in a friendly, free and easy manner. Whenever the Raja would be down in spirits and have his temper ruffled by anything untoward the court-jester would be at his elbow, trying to cheer him up. All kings and great men in the east-keep such jesters, who by their innocent mirth and friendly chat waked up the spirits of their august employers. This man, however, was an enemy disguised as a friend. He was a tool in the pay of the conspirators and tried to injure the Raja in the garb of a friend and devoted attendant. One day, the Rajah was sitting alone in his drawing-room, when this man turned up and said.

"What ails my Raja of Rajas? He is not in his wonted spirits. Has he taken a drop too much."

"A trounce to your jests. Don't you see, that I am badgered and bullied by my enemies. I have half a mind to leave my raj and end my days in the jungle in peace."

"In the jungle and in peace! surely, it is blowing hot and cold in the same breath. What peace can accrue in the company of wild beasts and by eating ripe and half ripe fruits?"

"You have no mind, my friend, your stomach rules you."

"One's stomach and better-half rule every-body."

"Both don't hold good with me."

"Don't they? By Jove! Your wife rules you with an iron rod. She can mould you to any shape. Had it not been so, how could you allow her to go into the jungle alone?"

"Going to the jungle alone! What do you mean by it. Explain yourself."

"Are you really in the dark, about this particular dodge of your Rani? She has her reasons to keep you in the dark, but I thought you were a loving couple and had no secret from each other."

"You are speaking in riddles. I don't understand a syllable of it."

"Excuse me Raja, I must keep my tongue in check otherwise my head may not be in the right place above my shoulders."

"Don't bandy words with me. I am in temper, don't trifle with me. Explain yourself."

"Sir, I obey you. I know as a positive fact, that your wife has gone out today in the jungle alone"

"For what purpose?"

"I need not say that in so many words. You can yourself go to the place and see for yourself. I will shew you the way, if you like."

"Come on, then."

Without saying anything to anybody, the Raja and the toad-eater left the palace surreptitiously on horse-back. *Enroute* they had no talk. The Raja was boiling with rage and half smothered expressions of anger escaped from his lips. A couple of hours, ride brought them to the jungle, when Daji dismounted and asked the Raja to do likewise. Fastening their horses on a tree, both of them went towards the temple in a round about way. They proceeded cautiously, taking care not to make the least noise. The Rani's *Palki* and retainers were waiting a short distance, from the *Mandir*. Brushing past them unperceived they entered the temple through the back door. Although it was day light still, the darkness within the temple was such, that nobody could see another a few yards off. The Raja noticed the Rani standing in front of the effigies of Hyra-Parvati. She was crying and in heart rending tones supplicating to the deities to bless her with a child. There was no response and the place was as solemn and still as the grave. All at once, a beautiful youngman came out and said something in whisper to the Rani. He brought his lips so close to the ears of the Rani, that in the uncertain light of the deepening gloom, it appeared that the youngman was kissing her. The court jester insinuated that much to the jealous, infuriated Raja and he believed everything that fell from him

against the unspotted character of his unrivalled and incomparable Rani.

CHAPTER VII.

The darkened pall was raised and rent
A streaming flood of light was sent.

The Rajah remained rooted to the spot for a short time. He was shivering and the pallor on his face was death-like. The Rani had left the temple but the young man was there. The Rajah rushed towards him and holding him by his clothes dragged him to the open space in front of the temple. He tugged at his clothes so very violently, that the toga-like covering on the body gave way and revealed, to the gaze of the astounded Rajah, the features of a female. The Rajah was speechless for a moment and regaining his wits speedily, asked the woman, who she was and what brought her there. The woman would not answer and kept silent. Receiving no response to his queries, he caught hold of her hands and took her towards the spot, where the jester was standing. The man was lying dead on the ground, bitten, as he was, by a big cobra, which stood up on its tails, hissing angrily. The Rajah and his companion ran away from the place to the spot where the horses had been left. Before the Rajah had said anything, the woman knelt herself down on the ground and joining her hands together in a supplicating posture said—"Rajah, I had come to inflict the severest injury on you. Finding, that your wife was your guardian angel, your enemies tried to separate you from her and for that purpose, they hatched this plan, by which, they hoped to shew you, by oracular evidence, that your wife was unfaithful to you. Providence has saved and protected her and one of the ring-leaders of the plot is lying dead from snake-bite whilst one of their tools in the person of my miserable self, has been exposed and you see before you a miserable, unhappy and vicious woman, who had tried in vain to injure a being, who is an ornament of her sex. Know Rajah, that I had induced the Rani, knowing her weakness to obtain children, to come here and I was playing the part of a male, disguised in the garb you have just torn off. Kill me, I deserve such a fate, but make the most of your Rani, who has not a prototype of her, in this wicked world. The Rajah liberated the woman and told her to go her way. He jumped up on his horse and galloped away.

CHAPTER VIII.

In peace he came and duly slept
In fond embrace he held and wept.

He had not gone far, when he noticed the woman following him, riding the horse belonging to the Court jester. The Rajah reined in his animal and allowed the woman to come up to him. Coming to his side, she said—"Rajah, I had forgotten to impart a secret to you. Don't go by the way you came. Your enemies are in full force, on that track and have made up their minds, to murder you. Please go by this route and she pointed out another track. Take this bit of paper also. In it, you will find written up the names of your enemies—arch traitors and plotters. Get rid of them, by deporting them to British territory, with the help of the British authorities. Now, good-bye, give me a kind word as you will never see my face again." The Rajah was much touched and asked her to come with him. She refused the offer, whilst tears trickled down on her cheeks. Sobbing and crying, she urged her horse with the whip in her hand and was out of sight in a moment. The Rajah returned to the palace, late at night and at once entered his sleeping apartment. He found his wife in deep sleep, smiling innocently. He kissed her and laid himself down by her side.

CHAPTER IX.

He baffled his numerous foes
And thus got rid of his great woes.

Early next morning the Raja and the Rani journeyed by dak palky to British territory and interviewed the wife of the official, who had befriended the Rani sometime ago. In consultation with her husband, she advised the Rani to haul up the conspirators for trial. The conspirators were arrested, duly arraigned and tried. They were convicted and received various terms of imprisonment for their crime. The territory of the Rajah was denuded of bad characters and he was left in peace to reign over his subjects. He was blessed in his wife, but the thought of being childless, often preyed upon his mind. One day after finishing his puja of the family and tutelary god and goddess (Radha and Krishna) in his own temple, he was about to go to his quarters for his breakfast; when he espied a ~~bee~~ leaf, coming across the temple yard and

falling on his lap. In it, was written, in vermillion, in pretty tiny character the following significant words—"Your heart's desire would be fulfilled and you would be blessed with children, if you make the most of your wife. Oft and now, you have caused her considerable pain and the deity is justly incensed against you. Love and adore her, like a veritable goddess and you will be blessed." The Rajah was taken aback by the writing and fully realizing the truth and force of its statement, he made up his mind to make amends. He was always with his wife and made it the object of his life to shew her the greatest devotion and love. The Rani was so very pleased with the change, that she thought her happiness in life was complete. The *Sadhu* who had helped her more than once, in critical moments of her life, told her to perform a *jagna* along with her husband. The oblations and offerings to fire and various gods and goddesses were given away in an auspicious hour and the result was, that a fortnight after she had partaken the *jagntic charu* (preparation of milk, ghi and other ingredients offered to the *devatas*) she conceived, to the delight of all, and in good time gave birth to a fine, healthy male child, whom the astronomers and astrologers predicted would be the glory of the house. The true love of a woman goes far to protect and save the beloved. A wife's love is holy and is of heaven—heavenly.

KHAGENDRA NATH ROY.

ADMINISTRATION OF THE AFFAIRS OF CEYLON,
1896-1903.

[EXTRACTS FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW.]

II.

RAILWAY EXTENSION.

I came to Ceylon a fervent believer in railway construction; and convinced that under certain conditions a railway will create the traffic to justify its existence. But, even if I had come here with doubts, they would have been speedily dispelled after even a cursory examination of your railway history. If ever there was a colony which is justified in believing implicitly in the advantages of an enterprising railway policy, it is Ceylon. In its existing railways it has a magnificent and highly remunerative property from which the Colony generally in all branches of its administration has greatly been benefited. The railways of this Island have during the forty years of their existence contributed about 33 millions of rupees to general administrative purposes, such as hospitals, schools, &c. Between 1862 and 1902 the Ceylon railway accumulated 72½ millions of profits, and, after paying over 27½ millions in the shape of interest on capital outstanding and 11½ millions towards a sinking fund for the extinguishing of the debt, left a handsome surplus of 33 millions available for Colonial purposes. The capital outlay on the whole mileage open at the end of 1902 is estimated to be about 58½ millions of rupees, so that the gross profits have already more than covered the total capital outlay.

Such were my views on railway extension in general and as regards the particular lines which I wished to see constructed in Ceylon. In the months which followed the deliverance of my first address I carefully considered the practical aspects of the question, and as the result of my inquiries I recommended to

the Secretary of State the early prosecution of the three railway projects which I have indicated, *vis*, the Northern railway and the Kelani Valley and the Uda Pussellawa railways, the two latter as light railways on the 2-ft. 6-in. gauge. Of these three, one is already completely finished and open for traffic, part of the second is open and the whole line will be ready shortly, and by the beginning of 1905 the third, which will bring Colombo and Jaffna within twelve hours of each other, will, it is hoped, be open for traffic along its entire length.

It will be convenient to deal with each of these undertakings separately; and it is natural that I should first turn to

The Northern Railway

which holds pride of place, not only on account of the long period of agitation which preceded its sanction, but also by reason of its length and cost. Doubts are even now entertained in some quarters as to whether the line will not be a burden to the Colony for many years, and it is therefore desirable that I should on this occasion place on record, even at some length, the facts which, in my opinion and in the opinion of most unprejudiced observers, abundantly justify the construction of the Northern railway.

Let me give you some idea of the position of the Jaffna district as it was, and as indeed it still is in many respects and will be until the railway is completed. For this purpose I shall quote from the memorial presented in 1889 to Sir Arthur Gordon, a memorial signed by five Members of the Legislative Council, the editors of the four newspapers in the Colony, and many other influential members of the general community.

It will be seen that the memorialists based their case for the Northern railway on the evils resulting from the isolation of the Jaffna peninsula and the congested state of its population, and on the desirability of re-opening the large and once well-populated, but now desolate, tracts between Jaffna and Anuradhapura, which were the scene in the past of very active agricultural industry, which is indisputably capable of revival in the future.

In addition to what may be termed these purely local arguments for the railway, there were two others of considerable importance. In the first place, there was the labour question. The chief danger which threatens the planting interests of Ceylon

is the possible failure of the labour supply which is drawn from India. The stream of immigration is now concentrated on the Tuticorin-Colombo route but when the railway is extended to Rameswaram it will probably return to its old channel by the north. This will be in the interests of Colombo, for, however admirably managed the camp of detention and quarantine at Ragama may be, the debarkation annually at Colombo, and their detention in its neighbourhood, of 50,000 coolies, coming often from cholera-and-plague-infected districts in India, must be a source of danger to our principal port of call. When, moreover, with the exception of the passage across the narrow straits between Paumben and Mannar, a cooly can travel by rail practically the whole way from his home to the estate on which he is to work, his reluctance to come to Ceylon will be greatly diminished, and the stream of immigration will gain force and regularity.

Lastly, the advantages to the Colony of direct railway communication with India are indisputable, both from a commercial and strategic point of view. No one can doubt that Colombo would in time of war be a most important position, which would never be allowed to fall into the hands of an enemy. Such a risk India could never tolerate, and it might be necessary for her, should our naval supremacy in the Eastern seas fail us even temporarily, to send troops to Ceylon for the defence of Colombo (and possibly of Trincomalee and Galle) against an enemy who might desire to seize so important a position and make it a coaling station and base of operations against India.

The construction of the railway at the Kurunegala extremity was begun in April, 1900, and at the Jaffna extremity in July of the same year under Mr. Oliver as Chief Resident Engineer. The Kankasanturai-Chavakachcheri section, consisting of the 21 miles of the line which include Jaffna itself, was opened by me for public traffic in March, 1902, and the Chavakachcheri-Pallai section, 14 miles in length, was opened in the following September. It is expected that the Kurunegala-Anuradhapura section will be ready for opening early next year, and the rest of the railway at the beginning of 1905. In other words, in little more than a year from now it will be possible to leave Jaffna in the early morning and be in Colombo in the evening of the

same day. Within the last few days I have had an opportunity of appreciating the advantages of the railway over the present tedious mode of transport, as I was able to reach Anuradhapura in the space of a few hours, travelling almost the whole way by rail.

As we anticipated, the section of the railway in the Jaffna peninsula, although proving a considerable convenience to the travelling public, has not so far been remunerative from a revenue point of view, owing to the fact that from its short length and isolated position it does not offer facilities for the transport of goods and passengers which will follow its connection with the southern system of railways.

There have been two estimates of cost made for the Northern railway which I may here mention is 198 miles in length. The original estimate made by Mr. F. J. Waring, C.M.G., in 1894 amounted to Rs. 98,90,482. A revised estimate was made in 1901 by Mr. Oliver, and approved by the Consulting Engineers; this amounted to Rs. 11,029,376, or Rs. 55,340 per mile, and as far as can be seen at present it is expected that this estimate will not be exceeded.

The contrast between the area under cultivation in the North-Central province and the vast extent of the estate which remains to be developed is most striking. The province contains 4,002 square miles, or more than $2\frac{1}{2}$ millions acres, equal to nearly one-sixth of the whole Island. It is impossible to state with any accuracy what percentage of this extent can be made fit by irrigation for permanent cultivation, but, judging by the innumerable number of tanks, varying in size from the largest reservoir to the smallest village tank, which are closely scattered all over the country, and by the channels and canals which intersect it in every direction, there cannot at the lowest computation have been less than $1\frac{1}{2}$ million acres under cultivation in former days. The total area at present under permanent cultivation is approximately 65,500 acres, *i.e.*, arable land 60,000 acres, and gardens (*i.e.*, cocoanuts, fruits, vegetables) 5,500 acres. In other words, the extent now under cultivation is considerably less than one-twentieth of the full extent which might be cultivated, given water and population.

The crops raised by the indigenous native methods of cultiva-

tion, both on fields and gardens, are indeed but poor compared with what the soil would yield under more energetic treatment and more careful and scientific methods of husbandry, and it is not to the indigenous population that we must look for the restoration of the ancient prosperity of the district so much as to the industrious Tamil from the North and the intelligent low-country Sinhalese from the South, whom the large irrigation work, the systematic restoration of which has fast commenced, and the railway will attract. These settlers, with a spare sprinkling, it is hoped, of European capitalists, will introduce new blood, new energy, new ideas, new methods.

Already there are abundant signs of the changes which, I hope, the opening up of the country will produce. In Anuradhapura there is very evident anxiety to acquire land, and brisk competition may be expected. Rents, both of private property and of Crown sites, have risen very largely. Landlords are now demanding, and receiving, from 20 to 40 per cent. more for their houses than they received a year ago. Considerable activity has been shown, and is still being shown, by landowners in the town in building new shops or in demolishing old ones and replacing them by buildings of a better class.

The rack-rent of the North-Central province has increased by 17 per cent. since last year, and has risen from Rs. 31,200 in 1900 to Rs. 50,175 in 1903. The market rents have more than doubled in the same period. The rise in both is likely to be still more marked after the advent of the railway. I do not wish to appear over-confident, but there are abundant indications on all sides that the place bids fair to become a very important centre, with a considerable and constantly expanding trade.

But it is not only in Anuradhapura that hopeful signs are visible. The Government Agent has received several applications and inquiries for lands within reach of the railway not only for paddy growing but for the cultivation of aloes, cocoanuts, fruits, cacao, and other products both from European and native capitalists, small and great. Some of these have not yet gone beyond the stage of inquiry, but others are well advanced towards a definite conclusion. It is encouraging to find that no less than 1,780 acres of land have already been applied for under the recently restored Minneriya tank and 275 acres under Maha

Iluppallama. These applications were received almost as soon as it was known that the works would shortly be completed and the lands rendered irrigable. If such readiness be displayed to take up lands in so comparatively remote a part of the province as Minneriya, I am not, I think, too sanguine in anticipating that there will be even greater readiness to take up lands under the large irrigation works near the railway when they are restored.

Sales of land to the indigenous population have largely increased, and there has been a very marked increase in the number of applications from the villagers for permits to restore abandoned Crown tanks and thereby they earn additional land by their own labour. The villagers too have taken much more kindly than was expected to labour on the railway works. They have performed nearly all the jungle-clearing and much of the earthwork along the line, thereby earning several thousands of rupees. The result must tend to inculcate habits of steady industry, to create new wants, and to raise the standard of living.

As to the future capabilities of the North-Central province, paddy will probably always be the staple product of the country, but cocoanuts, tobacco, cotton, and fruits and vegetables of many kinds, have been, or are still being, grown with more or less success, in some cases without irrigation, in others with irrigation of only the most primitive kind. With regular water-supply and proper systems of cultivation all these should be profitable industries. Arecanuts too, already established in some of the village gardens, should, if protected from cattle in their younger stages, flourish along the water-courses which intersect every range of fields, while there seems good reason to expect that india-rubber, cacao, and other industrial products may be successfully grown under irrigation. Government is about to make experiments with cotton and india-rubber, and the Government Agent has recently received inquiries for land for cacao.

On the dry unirrigable land the Director of the Royal Botanic Gardens considers that conditions are very favourable for the growth of aloes, in the cultivation of which a European pioneer proposes to embark; if he can find means to extract the fibre economically, his enterprise should pay handsomely. On these lands also grains of all sorts—Kurakkan, gingelly, Indian corn,

amu, &c.—and peas and beans of several varieties can be grown, and will yield large returns.

The country will always remain covered with large tracts of forest which should afford a profitable revenue as soon as the railway is opened. These forests contain many of the most valuable timbers to be found in the Island, such as ebony, satin, palai, na, kumbuk, wewarna, pihimbiya, halmilla, milla, &c.

An industry which might be made to rank among the chief sources of the wealth of the people is the cattle-breeding, seeing that pasturage, so scarce in other provinces, is here abundant. Every village is now overrun with cattle, both buffaloes and black cattle, so much so that they outnumber the population in the proportion of about twelve to seven. Their owners take no sort of care of them, and beyond using a small proportion of the buffaloes for ploughing, and selling a few of the barren cows to itinerant traders who purchase for the Colombo and up-country meat markets, make no use either of them or of their produce. They roam at large, breeding in and in, untended, and often doing more damage than they are worth by trespassing on cultivated lands. With a little care of them when they are sick, feeding them during seasons of drought, and attention to breeding by castration of the inferior bulls, the stamp of cattle might be greatly improved.

A further resource regarding which but little is known at present, but which the country may yet prove to possess in paying quantities, is minerals. Indications of plumbago have already been found, with no scientific prospecting, in several parts of the province, and the results of the labours of the Government Mineralogist in these parts of the Island should prove of great interest.

In the Jaffna peninsula itself there is no possibility of extension of cultivation, for all the available land has long since been taken up. Contrary to expectation however, the Jaffna cooly has been going south. At first, it was impossible to get him to work on the railway south of Elephant Pass, but towards the end of last year large gangs of coolies from all parts of the peninsula were found working at Vavuniya and along the line to the boundary. This is a clear indication that the Jaffna villager is getting over his dread of the Vanni, and a most hopeful sign of increase of population—the chief want of the Vanni. These

men naturally see how much easier life can be made where soil is good and water available than it is in the peninsula, with an unending daily struggle for existence. Yet they have a great love of "home," and it is the present difficulty of getting there for business, pleasure, or health that has hitherto prevented the Jaffna man from settling in any considerable number in the Vanni. The railway will obviously change all this.

The first steps towards taking up land along the line has been made by a company of Jaffna gentlemen who have applied for 3,000 acres of paddy land near Parantan. Several applications have been received from local inhabitants for small lots and for abandoned tanks along the line, but the Government Agent has wisely deferred alienation to small speculators until the time when the line is open, when there will be a fair opportunity for selectors to visit and see the capacity of the country. Of its capacity there can be little doubt, although it is popularly supposed to be "a desert." No one visits it except Government officers, but I believe it only requires to be examined to commend itself to the experienced and earnest agriculturist. If means of access are provided, feeder roads pushed on, village tank restoration and general storage of water kept constantly in view, the Vanni will be re-inhabited.

I have dealt at this length with the question of the country traversed by the Northern railway because, as I have stated, erroneous ideas prevail among many, and in order to re-assure you as to the prospects of this great undertaking. Will this railway pay? I believe that it will pay, and that in course of time, far from being a drain on your revenues, it will augment them. I think that I must have satisfied you that the country traversed by the railway is sufficiently fertile, and that if the ancient irrigation works are restored it should become, with the Eastern province the granary of Ceylon. The work of restoration has been energetically taken up, as I will prove to you when I come to deal with irrigation. What is required to ensure success is population. Will settlers be attracted by the advantages which we can hold out to them? The subject has from the day when it was decided to construct the railway continually engaged the anxious attention of Government. The Government Agents and other experienced officers have been consulted more recently at

the conference in Kandy last June, and I am happy to say that they at last have no misgivings on the subject, particularly the experienced Government Agent of the Northern province, whence the bulk of the settlers must come. Mr. Levers has no doubt that the Tamils will eagerly take up land as soon as they can obtain easy access to it by railway. I have already noticed the indications that the dislike of the Jaffna Tamil to leave his home and to occupy the dreaded Vanni are being overcome. The Government must not however, rely on the Tamils of Jaffna. The Sinhalese of the south, and possibly the Tamils of South India, must also be induced to take up land. European capital should also be encouraged to flow in this channel. This can best be done by proof that the land is really fertile and can raise remunerative products, and by offering land on liberal pioneer terms. The former condition can best be proved by experimental cultivation. Regarding the suitability of the land for cocoanut cultivation, there is evidence in all directions. That rice and tobacco can be produced wherever there is irrigation is also beyond doubt. But there are other products, such as cotton, and in certain localities tobacco, of which the successful cultivation is more doubtful, and in order to dispel these doubts it is proposed to begin experimental cultivation of limited areas in different localities. The first experiment will be with cotton.

There is already a local market in Ceylon for a large quantity of cotton, and the price has recently risen considerably. Determined efforts are also being made in Lancashire to get sufficient cotton grown within the Empire to render the English mills independent of foreign supplies, and valuable help in the supply of seed, machinery, and advice is being given us by the British Cotton-growing Association. An area of 150 acres of land has been reserved under the newly restored tank of Maha Illuppalam, about 12 miles from Talawa station. On this, various kinds of cotton will be planted in blocks of 20 to 25 acres each, and divided by belts of rubber and cacao, both of which give promise of success under irrigation. South Indian cotton, already grown on a small scale here, will be tried in order that it may be ascertained whether better yields, both in quantity and quality, cannot be obtained than by the village cultivation in Madras. Egyptian and American cottons will also be tried under irrigation and on high land, with the object of

determining whether they will not give a good yield without losing their distinctive valuable qualities of fineness and long staple. It is also intended to issue seed to villagers and to buy in the crops at fixed rates for a few years, in order to encourage the experimental cultivation as widely as possible. Cotton requires both manures and rotation of crop, and part of the land will therefore be devoted to fodder plants and to the raising of a small quantity of stock. The latter will be fed on the fodder and on cotton seed, a most valuable cattle food, which at present has to be largely imported for this purpose.

When these experiments have been successfully carried out the results will be published, and favourable terms will be offered to those who are willing to take up land.

The Kelani Valley Railway.

[The history of the agitation for this railway and of the solution of the knotty question of gauge is here detailed, as also the story of the progress of its construction.]

The Kelani Valley railway is thus finished: the greater portion of it has been open for a year, and we are therefore in a position to examine the financial aspect of the first narrow-gauge railway in Ceylon. First, as regards the cost of this railway. The estimate of cost, which originally stood at Rs. 57,546 per mile, has been thrice increased, until now it is placed at the very high figure of Rs. 112,000, or as nearly as possible double the original estimate, and about double the actual cost of the Northern railway. It must be admitted that Mr. Mackintosh's original estimate of Rs. 57,546 per mile was too low; the line had a large number of sharp curves, and was in many places below flood level. The Consulting Engineers in revising the estimate rectified these defects, and also made provision for increased width of embankment; increase in number and span of bridges; increase of weight of rails from 36 lb. to 46 lb.; additional station accommodation, and other improvements. But these improvements raised the cost to Rs. 85,583 per mile, and unfortunately the necessity for further revision was not at an end. After some six months' experience of actual construction the Chief Resident Engineer found that the sanctioned estimate was likely to be exceeded. The amount of rock met with in cuttings was greater than had been expected,

and in particular the work on the last two miles, which had not been previously estimated for was heavier in earthwork, bridges, and culverts than on the rest of the line as previously estimated. These factors, the provision of additional bridges, stations, &c., which were found to be necessary, and other causes combined to raise the estimate a second time to Rs. 99,583, or 15 per cent. in excess of the previous estimate. And now Government is informed that even this estimate will be exceeded by nearly 11½ per cent. and that, in other words, the final estimate will, as I have said, be over Rs. 112,000 per mile.

It is true that with a line of a new and special gauge, like the Kelani Valley railway, and in a country where the bridges are both numerous and heavy, where there is difficult work in foundations, and where are many rock-cuttings, it was naturally difficult to form an accurate estimate in advance. It is also true that the line, although of a narrow gauge, is a thoroughly well equipped one, and that it has been constructed with a view to dealing with large traffic. Contrary to our intentions the Consulting Engineers have supplied us with a heavy railway with a narrow gauge. Again as regards the excess of cost of the Kelani Valley and Uda Pussellawa railways over that of the Northern railway, the defence of the Consulting Engineers is, I think, reasonable. "No comparison," they say, "can justly be made between the mileage cost of a railway running for the most part of its length through a comparatively dry district, where most of the land is in the possession of the Crown and is therefore available without payment, where the rock and earthwork and bridging, including culverts, are light, where the stations are generally but small ones and far apart, conditions obtaining on the Northern railway, with the cost of railways like the Kelani Valley and Uda Pussellawa lines, where the opposite of each of these conditions exist." The fact, however, remains that the Kelani Valley railway has cost nearly 30 per cent. more than the sanctioned estimate, and before further schemes of railway extension can be sanctioned, the practicability of lighter and cheaper railways must be fully considered. I would remind you that the cost of a broad-gauge railway through the Kelani Valley would have been proportionately greater.

The large increase in capital cost of construction means, of course a proportionate increase in the annual sum which it is necessary to

set aside for interest and sinking fund, which will now amount to Rs. 215,200 instead of Rs. 115,100, as originally estimated. Nevertheless, there is little doubt that the line will soon be a profitable undertaking. The returns for the first eight and a half months of this year were as follows : Receipts Rs. 194,711 ; working expenses Rs. 118,600 ; balance of receipts over working expenses Rs. 76,141 ; proportion of interest and sinking fund on the cost of construction of the portion of the line open for traffic, for the corresponding period Rs. 103,904 ; leaving a deficit of Rs. 27,763. In other words, the receipts fell short of the amount required to pay all expenses and charges by Rs. 3,266 per month. I may add that this deficit was considerably smaller during the earlier months of the year but the heavy rains of the later months had an adverse effect on the traffic returns. It must, moreover be borne in mind that these figures are based on traffic on a portion only of the line. This fact affects the profits adversely in two ways : it magnifies the working expenses, which would have been very little more if the whole line had been open ; on the other hand, the section which was not open when the above figures were calculated is the section from which the largest amount of traffic is anticipated, the tea estates from which most revenue is expected being in the Yatiyantota district. Even now, although the railway is open to Yatiyantota, the full traffic must not be expected until the construction of the road bridge at that place is complete.

Meanwhile the traffic returns present some very hopeful features. In the first place, the number of passengers has been far in excess of that estimated by the Commission of 1894, the total number for the first six months of the railway's existence, 148,887, being nearly equal to the number estimated for a year's traffic by the Commission. The receipts from goods traffic show a steady increase this year on the receipt for the last three months of 1902, the figures being for October-December, 1902, Rs. 22,764 and for January-March, 1903, Rs. 30,245. It may be noted also that the average earnings per mile per week for the first three months in 1903 were Rs. 147. In India, out of thirty-four railways of the metre gauge and seven railways of special gauge, there were only seven railways of ordinary gauge and one railway of special gauge (the Darjeeling-Himalaya railway) of which the earnings exceeded the above amount for the same period.

The latest report received from the General Manager covering the first complete year's working of the railway—i.e., from 15th September, 1902, to 14th September, 1903—fully bears out the anticipations based on the results of the first few months. The total number of passengers carried between Colombo and Avisawella (the only section open for traffic) was 300,197, or almost double the number estimated by the Commission which reported in 1895. The total coaching receipts amount to Rs. 158,712 for the same period, or between Rs. 8,000 or Rs. 9,000 more than the estimate for this section. It is curious that the receipts are so near the estimate while the passengers have so far exceeded expectations, and the general Manager explains that a large number of passengers have travelled over shorter distances than were estimated for by the Commission, while fewer have travelled the longer distances.

As regards goods traffic, the actual tonnage for the year was 20,676, and the receipts Rs. 105,276. The estimated tonnage and receipts of the Commission for stations up to Avisawella were 16,937 tons and Rs. 87,738 respectively, so that as regards both items the figures exceed anticipations. These figures, encouraging as they are, can only be regarded as an earnest of what is to follow, and I firmly believe that this well-equipped and durable railway will, from an administrative point of view, more than fulfil expectations, and speedily prove a profitable addition to our system.

Nanu-oya-Uda Pussellawa Railway.

The third railway which I proposed to construct was a light railway or tramway from Nanu-oya to Nuwara Eliya and Uda Pussellawa. When I arrived in Ceylon in 1896 I found a sustained agitation proceeding in favour of road railways or tramways in the hill tea-producing districts.

As regards the question of cost, I regret to say we are confronted with much the same unpleasant facts as in the case of the Kelani Valley railway. Successive estimates have largely increased in amount. The first surveys for the line were made in 1895 and 1896 by Mr. F. J. Waring, C.M.G., and by Mr. R. K. MacBride, C.M.G. According to these estimates the mileage rates were Rs. 56,695 and Rs. 50,555 respectively. In 1897, a new survey was made by Mr. P. A. Mackintosh, and the cost per mile according to this

survey, and after the estimate had been revised by the Consulting Engineers, was Rs. 61,879. In 1899-1900 another survey was made with certain improvements in the alignment recommended by the Consulting Engineers, and for this line the mileage rate was estimated at Rs. 67,602, giving a total cost for the line of Rs. 1,301,352. It was on this survey and estimate that construction of the line was actually begun.

We are now, however, told that the estimate was of Rs. 1,301,352 and that the actual cost of the line will probably be about Rs. 1,537,000 and even this sum does not include the contribution of the open line to the cost of the alteration of Nanu-oya station, Rs. 94,230. In other words, the cost per mile will probably amount in round numbers to Rs. 80,000. Some of the causes of increase are, it may be hoped, local and incidental only. For instance, the greatest increase of all is under the head of "Land and Compensation." When the estimate was made, it was assumed that some of the land required for the railway would be given free of charge. This has not been the case, and the tea land has, in fact, cost very high prices, much higher than was estimated, in some cases over Rs. 2,000 per acre : the compensation paid for the military land was also far higher than could have been reasonably anticipated. Another large increase is in rolling stock ; this is due principally to alterations in designs for carriage stock ; it was at first intended to have carriages open at the sides, but closed carriages were afterwards adopted. In permanent way there is a large increase caused partly by the cost of carting material in order to start platelaying beyond the first part of the line on which work was delayed by late acquisition of land, partly by the scarcity of ballast at so many places which necessitates long transport of this material, and also by the cost of laying the permanent way, which is higher than was expected. Again, it was not originally intended to fence any part of the line, but it has now been found necessary to erect fencing on some parts of the road where the line runs close to it, and also to provide gates at several of the level crossings.

However reasonable these and other explanations may be I cannot admit that they satisfactorily account for the whole of the increase in the cost, and in any case we have to face the broad fact that our first two light railways in Ceylon have

cost, respectively, Rs. 112,000 and Rs. 80,000 per mile. A Commission of Inquiry has been asked for, and, with the sanction of the Secretary of State, the request will be acceded to by Government. The instructions to the Commission will be to inquire whether it is feasible to introduce a less expensive type of railway than those which have recently been constructed; and upon the result of that Commission must depend the question whether other light railways are to be constructed in this Colony. Unless their cost can be reduced, railway extension in many parts of the Island will be checked, if not stopped altogether. Possibly a solution of the problem will be found in railways with electricity as the motive power. A report by Mr. J. C. Willis, Director of the Royal Botanic Gardens, who recently made a tour through America and the West Indies with a view of gathering information as to the working of a Botanical and Agricultural Department, contains some interesting observations on the subject of American electric railways. After commenting on the remarkable efficiency and cheapness of transport in America with its resulting benefits to agriculture, Mr. Willis goes on to say: "The striking sign of the times is the success of the light electric lines, which cover the whole country, and which are taking away a large proportion of traffic from the railways, not only (as in England) up to 6 or 8 miles from the town, but up to 60 and 80. These lines are lightly laid along the sides of the roads, and the cars run singly at frequent intervals and at the speed of 30 to 70 miles an hour. Reaching a town the car slows up and runs through the streets on the ordinary tram rails, stopping at corners. For passenger and light goods and parcel traffic these light lines are driving out the railroad in many places, and opening up the country wonderfully. In some districts they are worked by single steam motor cars, but the most usual vehicle is the electric trolley car. Neither cars nor gradients present any serious obstacle to lines of this kind, and I think this type of railroad might be well suited to the opening up of Ceylon, and even to main line traffic. I travelled in several places along lines with worse curves and gradients than the Colombo-Kandy line and at a considerably higher speed, while the frequency of the service is an immense advantage over the ordinary railroad trains. Tickets being sold and collected by the conductor of the car, no stations* are required, and automatic signalling is used; stops can be made anywhere. I am

decidedly of opinion that the old-fashioned railroad with frequent stations and heavy trains will soon be used almost solely for long distance express traffic and for heavy goods, especially to the ports, while local traffic and the feeding of the heavy lines in thinly populated districts will fall to the electric or motor coach lines.

Mr. Willis adds: "While at Pasadena in South California, I saw an interesting engine that should open up possibilities in our sunny north country, *viz*, the solar motor, a recent invention for working an engine by the heat of the sun, concentrated on to a boiler by means of mirrors. This machine, though a little expensive to construct, works very cheaply, and I was informed that the company had already had orders for several for Egypt and India."

FURTHER RAILWAY EXTENSION

This concludes my review of the three railways which have been undertaken during my administration, but I may briefly summarize the results in so far as they affect the total mileage of Railway in the Colony. When I assumed the Government on the 10th February, 1896, the total length of the open railway was $297\frac{1}{2}$ miles. It now stands at 386 miles. When the remaining portion of the Uda Pussellawa railway is open, and the Northern railway is open along its whole length, say, in 1905, the mileage of your open railways will have increased $562\frac{1}{2}$ miles.

Such is the position as regards the past and the present: What is to be the policy regarding railway extension in the future?

The first project which suggests itself, and which presents perhaps the most immediately favourable prospects, is the construction of a branch of the Kelani Valley Railway from Avisawella to Ratnapura, and possibly to Pelmadulla. As I have pointed out, the traffic returns from the open section of the Kelani Valley Railway have far exceeded expectations as regards passengers, and are very encouraging as regards goods.

In the Supply Bill for this year a sum of Rs. 25,000 was provided on account of the survey of the proposed extension, and survey operations were commenced in the early part of January, 1903. The resulting estimates are not yet completed, but Mr. Phillimore considers it probable that the cost of the proposed branch—which would be 27 miles in length—would amount to

Rs. 108,000 per mile. The report of a Committee which I appointed in April last to consider the probable amount of traffic has just been received and is now under consideration.

Another suggestion which has been in the air for a considerable length of time has this year been brought within scope of practical politics. I refer to the proposed light railway to Negombo and Chilaw, and possibly Puttalam. The range of inquiries of the Commission which I appointed in the beginning of this year has recently been extended in order that a proposal to connect Puttalam and Kurunegala might also be considered, and the report of the Commissioners is consequently delayed. I can, therefore, only repeat now what I said last year, namely, that there would be no doubt regarding the desirability of undertaking such a railway were it not for the existence of the canal and the consequent competition for goods traffic. The cost of the railway has been roughly estimated at Rs. 7,400,000.

Another proposal which naturally suggests itself is the construction of a railway to Trincomalee which would serve Batticaloa. From an administrative point of view such a railway is very desirable as it is unsatisfactory that the important naval station of Trincomalee and the whole of the eastern side of the Island is so inadequately accessible from Colombo. The need for better communication cannot, however, be considered pressing from a local point of view, and the construction of such a railway solely at the expense of the Colony would not be justifiable. When the Admiralty and War Office, to whom it would be most useful, are willing to contribute to the cost the proposal will be worthy of your consideration.

I must pass over the other railways which have been proposed, such as the extension of the southern line to Tangalla and Hambantota and the construction of light railways to Teldeniya and Badulla, merely remarking as regards the latter that I think you will agree with me that before we embark on any more hill railway schemes it will be wise to await the results of the working of the Uda Pussellawa railway. But before I conclude my remarks on railway extension, there is one project of the highest importance which I wish to commend to your earnest consideration. I mean the railway which is to connect Ceylon with her great neighbour India.

The cost of connecting the India and Ceylon systems across

Adam's Bridge must necessarily be so great that we have been accustomed to relegate its construction to the dim future: yet in recent years there have not been wanting signs that the prospect is becoming less remote. That the railway will eventually be made, I have not the slightest doubt, and I rejoice that the period of my administration of Ceylon has witnessed preparations on our side which have brought appreciably nearer the day of connection with India. I congratulate you that by the commencement of the Northern railway you have taken the first steps in a scheme which will assuredly one day link Galle and Colombo with Madras, Bombay, and Calcutta. As I remarked on a former occasion, it would have been a great disappointment to me if, when the Government of India were pushing on their railway to Paumben, we had remained idle, and had taken no steps towards establishing that connection which is so desirable in the interests of both countries. The recent Commission which sat in Madras to consider the question of gauge of an Indo-Ceylon railway is another sign, if one were needed, that the scheme is rapidly becoming a practical question. Nor indeed is it a matter for surprise I have already alluded to the commercial and strategical reasons which render connection with India of such great importance. From the local point of view I may repeat that it is the only satisfactory solution of the labour question, wherein lurks, in my opinion, the chief danger to the tea industry.

This is the position of affairs which I leave to my successor. The Northern railway is almost an accomplished fact, and in order to complete the purely insular side of the proposed connection with India it only remains to construct a railway from Madawachchi to Taladi, the extremity of Mannar island. In my retirement there will be few enterprises the progress of which I shall watch with greater interest than this momentous scheme of an Indo-Ceylon railway.

THE RAILWAY DEPARTMENT.

Of the new work projected, a very important one is the provision of a new central station for Colombo. This question has been under consideration for many years past, the several extensions of the railway from time to time and the great increase in the traffic, both goods and passenger, having rendered it increasingly difficult to carry

on the work satisfactorily with the accommodation available. The great difficulty has been to find a suitable site which will not only be desirable from the point of view of economical working, but also of convenience to the travelling public and the mercantile community in connection with the handling of the goods traffic. From a railway point of view, the the most desirable position is the site of the present Maradana Junction* station, where it was proposed to erect a handsome building with a frontage facing the Maradana road, the present Terminus station being closed for passenger traffic. Plans for a station at this place were prepared by the present Engineer of Ways and Works. Objection, however, was taken to this site on the grounds of its being too far from the Fort, and also because of the unsuitability of the approaches to the proposed station, and in view of this objection a new Committee has been summoned to consider afresh the whole question and ascertain whether any more desirable site can be found. This Committee has not yet formulated its proposals.

If the Maradana site is finally rejected, it is very probable that, owing to the difficulty in finding a suitable natural site, considerable expense will have to be incurred in filling in a portion of the lake. But if a new station is to be built at all, it should be one worthy of the capital of Ceylon, and therefore the necessary expenditure required to overcome the engineering difficulties will have to be faced.

A work of great importance, which may possibly have to be undertaken in the not very remote future, is the doubling of the seaside line, the traffic on which has become so crowded that punctuality is almost impossible. I need hardly say that such a project would involve very considerable expenditure.

PUBLIC WORKS : ROADS AND BRIDGES.

I confess that the development of the Island in the matter of its roads has not been quite so rapid as I hoped, and the time is still distant when the Colony will have all the roads which are necessary for its requirements ; but, nevertheless, very satisfactory progress has been made towards finality, and I think that the figures which I have quoted effectually support this assertion. I would invite your special attention to the fact that of the five heads of expenditure which I have mentioned, the largest is under

"Upkeep or Maintenance of Roads." The total amount spent on maintenance in the seven years preceding 1896 was Rs. 7,688,864, or an average expenditure of not quite 11 lacs a year. This may seem a large amount, but shortly after the present Director of Public Works entered upon his duties he reported that the sum allowed for upkeep in recent years had been quite insufficient to maintain the road in an efficient state, and that on many of the roads there was little or no metal left. In other words, many of the roads were in such an unsatisfactory condition that they required to be entirely re-metalled—that is to say, not re-metalled in the ordinary way, with a little metal put on them here and there, but relaid altogether. So strong a case did the Director make out that a very large increase was necessary to enable the roads to be kept up in a condition fit for traffic, that in 1898 no less a sum than about 13½ lacs, or 2½ lacs above the average of the seven years from 1889 to 1895, was allotted for the purpose; since then each year has seen an increase, and the total amount spent on maintenance during the last seven years has been Rs. 10,011,853, or an average of over 14 lacs per annum. The cost, though somewhat in excess of that obtaining in 1885, is still considerably below the expenditure of 1880, the year preceding the introduction of what is generally known in the Colony as the MacBride system. I believe the money to have been well spent, and that the state of your roads no longer justifies any reproach of neglect.

The total increase since 1895 in mileage of roads of all descriptions in charge of the Public Works Department has been 271 miles, that is to say, from 3,409 to 3,680 miles, the greatest progress having been made in the Central, North-Central, Uva, and Sabaragamuwa provinces. Special attention is being paid at the present time to "feeder roads" for the Northern and Kelani Valley railways. A special officer has been deputed for the duty of supervising this important work in the North-Western province, where the roads are most urgently needed, and considerable progress has already been made. The Director of Public Works estimates that about Rs. 120,000 will be spent this year on the construction of new feeder roads or the improvement of existing roads which are destined to become important "feeders" to the Northern and Kelani Valley railways, and a sum Rs. 360,000 has been included in the estimates

for next year for similar purposes. It is clearly sound policy to incur this comparatively small expenditure in order to increase as far as possible the facilities for using the new railways.

It has been urged more than once that it is desirable to transfer to the control of the Public Works Department the road work under the control of the district road committees, and that every road or path in Ceylon which is open to the public should be placed in charge of the department. I do not agree with this view, on the contrary, I would like to see the sphere of local bodies enlarged and their efficiency and usefulness increased. The result of the opposite policy would be a largely increased expenditure without any corresponding benefit to the community. In the course of my journeys through the Island I have frequently had occasion to note the good and useful work which is now cheaply and efficiently done under the supervision of these local bodies, whose interest it is to ensure economy.

Altogether during the period under review one hundred and six new buildings have been completed or are in course of construction. Among these are fourteen new hospitals affording provision for nearly five hundred beds, and including infectious diseases hospitals at Nawalapitiya and Nuwara Eliya, additions to ten hospitals, including the General Hospital, Colombo, eleven new dispensaries, eleven police barracks, eight post offices, five rest-houses, four court-houses, two land registry offices, and the immigrant cooly camp at Ragama. In addition to these, important additions and improvements have been made to the Welikada jail, the Leper Asylum, and the Lunatic Asylum.

Among the larger works now being carried out are the improvement of the Supreme Court and the construction of new Minor Courts at Hulftsdorp. The latter—namely, a new Police Court and a new Court of Requests—are already completed, and the old Minor Courts are now being converted into additional rooms for the Supreme Court. It is also intended to improve the general appearance of the Courts by enclosing the open space in front of the Supreme Court, and when all the additions and improvements are finished it will be found, I hope, not only that ample accommodation has been provided, but that you now possess High Courts of Judicature worthy of this important Colony.

The new Technical College is also now within measurable

distance of completion; while under the heading "Miscellaneous" a number of important works have been carried out, such as the erection of the statue of the late Queen Victoria, the partial duplication of the Labugama water main, the water supply to Nuwara Eliya, the landing jetties at Kalkudah and Trincomalee, the passenger jetty and improvements to the Customs premises at Colombo, the Dehiwala flood outlets, and the causeways at Mannar, Mohideentanda, and Periyamuhatuwaram.

The difficult question of flood outlets will possibly have to be faced in the near future. The floods in the Western province are caused by three rivers, the Kelani-ganga, the Kalu-ganga, and the Maha-oya, which together drain some 1,800 square miles, or nearly half of the mountain zone, and about 700 square miles of low country which is practically on the same level as the sea. Since 1873 when Sir William Gregory appointed a Commission to inquire into the subject, several works having for their main purpose the relief of flood water have been carried out by Government at a cost of some eleven and a half lacs of rupees, one of the most important, the Dehiwala flood outlet, which involved an expenditure of nearly Rs. 250,000, having been completed so recently as June, 1901. In view of the importance and difficulty of the subject, I considered it advisable soon after my arrival in the Colony to ask Messrs. Coode, Son & Matthews for a report on the practicability of opening out the mouth of the Kelani river in order to expedite the discharge of flood waters and also to increase navigation facilities. An elaborate scheme was accordingly drawn up involving an expenditure of over £400,000, but it seems probable that a smaller sum would be found sufficient to protect the low-lying country round Colombo from floods. The cost must, however, be very large in any case, and the Municipal Council, to whom the report was referred, have recently expressed their inability to incur the expense involved in co-operation.

Owing to other more pressing demands on the public purse the construction of new central offices* for the Public Works Department has been postponed from year to year, but this very desirable work will shortly be undertaken, and in a few years the department will, I hope be housed in a building worthy of its importance. A new central record office is also much required, and it will not be long before you will find it necessary to make

substantial additions to the fine building which accommodates the General Post Office ; lastly, as I have already remarked, a new central railway station for Colombo is a work which cannot be much longer deferred, while new buildings for the accommodation of the Government Stores will also have to be erected.

The officer selected by the Consulting Electrical Engineers to the Crown Agents, Mr. A. S. Barnard, arrived in Ceylon in May of this year, and has already been able to afford both Government and the Municipality very valuable assistance. As regards the former, his work consists in advising Government and local bodies on all undertakings involving the use of electricity, in enforcing the rules for protection of person and property under the Electricity Ordinance, and in supervising the plans and estimates and general work of the electrical branch of the Government Factory. His chief municipal duties are to advise the Council as to regulations for electric lighting and power, to conduct the necessary electric tests from time to time in connection with such regulations, and to advise upon any proposed electrical installation. I believe that this appointment will prove of far-reaching importance, and that very considerable advantages in economy and efficiency will undoubtedly be secured.

A DESCRIPTION OF LIFE AND RICHES.

The lands and the riches which here we possess
Be none of our own, if a God we profess;
But lent us of him, as his talent of gold,
Which, being demanded, who can it withhold?

God maketh no writing that justly doth say
How long we shall have it—a year or a day;
But leave it we must (howsoever we leave),
When Atrop shall pluck us from hence by the sleeve.

To death we must stoop, be we high, be we low;
But how, and how suddenly, few be that know;
What carry we then but a sheet to the grave,
To cover this carcass of all that we have?

TUSSER.

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ADMINISTRATION OF THE AFFAIRS OF CEYLON
1896 1903.

[EXTRACTS FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW]
III.

COLOMBO HARBOUR.

The history of the Colombo harbour during the last seven years is a record of large undertakings and material progress towards their successful accomplishment. At the present time, indeed, we are within measurable distance of the final achievement, not only of the breakwater extensions which had been sanctioned before my arrival in the Colony, but also of many other works, one at least of Imperial importance, which have been undertaken during my administration, while the initial steps are being taken towards further works of magnitude.

Nowadays we are all converts to the principles of harbour extension, and the younger generation, at least, are probably oblivious of the fact that the northern and north-western arms, which to-day seem the natural complement of the south-west breakwater, were for many years the subject of protracted discussion and correspondence.

This opposition postponed the consideration of the scheme until it was taken up by my immediate predecessor, Sir Arthur Havelock, who vigorously pressed its claims and advantages upon the Secretary of State.

question to Lord Knutsford in 1891, showed an evident desire not to under-estimate the possibilities of the future. So impressed indeed was he with these possibilities that whereas his financial advisers calculated that a period of fourteen years would see an increase of 50 per cent. in the harbour revenue, he confidently predicted that such an increase would occur in eight years from that date (November, 1891); that is to say, that in 1899 the revenue would amount to about Rs. 1,100,000. A year later (1892) an influential Committee estimated that the harbour revenue by the year 1897 would probably amount to a million rupees. Both these estimates were, I believe, at the time considered to be too sanguine; but what are the actual figures for those years? In 1897 the harbour revenue was Rs. 1,176,838, and by 1899 it had reached Rs. 1,347,318. Since then it has been steadily advancing, and the estimate for this year is Rs. 1,649,150. This amount, it must be remembered, covers not only all charges incidental to the management, lighting, &c., of the port, but also provides annually for the payment of instalments of principal and interest on all loans. Even after defraying all these charges, there is still a small credit balance, and it must be remembered that in 1911 the loan of £250,000 from the Public Works Commissioners will be paid off. So far, therefore, from the Colony having overstrained its resources by the adoption of a forward harbour policy, it is actually in a better position to-day than it was before Sir Arthur Havelock assumed the Government, when harbour expenditure exceeded the harbour revenue. It is true that our liabilities are larger: there still remain some Rs. 25,000,000 to be paid off, and it will not be till about 1948, or possibly later, if much additional expenditure is incurred, that your harbour will be free from debt, but that this liquidation will be effected without in any way crippling your powers in other directions does not seem to admit of any serious doubt, and certainly causes me no misgivings. The advance during the past has been very marked, and we may fairly hope that it will continue.

The approaching completion of the north-west or "island" breakwater has made it necessary to decide the question of the width of the entrance to the harbour between the old or south-west breakwater and the island breakwater, and after full consi-

deration the width has been fixed at 800 feet with the concurrence of the Consulting Engineers, the Admiral, and the Harbour Board. No narrower entrance appears to be convenient for navigation, but it is considered that a width of 800 feet will be sufficient for the largest steamers to enter the harbour.

On the other hand, it had been hoped that, in order to ensure adequate shelter to the coaling jetties and the new graving dock, it might be possible to reduce the width of the entrance to 700 feet, and doubts have been freely expressed whether reducing it only to 800 feet will have the desired effect of sufficiently calming the water in the harbour during the south-west monsoon. Careful observations will be taken during the next south-west monsoon, when the width will have been reduced, but the Consulting Engineers admit the possibility of it being necessary to undertake certain additional works, such as a small island breakwater in front of the coaling jetties, in order to facilitate approach to the jetties and the graving dock. Another possible alternative is to close the present entrance entirely and make the gap between the north-west and northern breakwaters the sole entrance to the harbour, but to this proposal there are financial and sanitary objections.

But you have not been content to merely carry out the undertakings of a previous Government. Several other important new works in connection with the harbour have been undertaken during my administration, involving an additional appropriation of some 11 million rupees. The necessity for the chief of these, the graving dock, was, as I have already indicated, one of the arguments in favour of the construction of the northern breakwater. For over twenty years it had been felt that Colombo would never rank as a first-class port until a dry dock was provided for the cleaning and repairing of the largest merchant and war ships likely to frequent the port. At present any ship coming to Colombo and requiring the use of a dock has to proceed, either under her own steam or in tow, to Bombay or Singapore. The question was repeatedly brought forward, and it was finally decided that it would be useless to construct a dock until steps were taken to close in the harbour. As soon, therefore, as the harbour extension works were started the graving dock scheme was taken into consideration, and after negotiations between the Colony and the

Admiralty, each agreed to pay half of the cost, which was estimated at Rs. 5,218,380.

The dock, when completed, will be the finest and largest in Asia. Indeed it is hardly too much to say that it will challenge comparison with any of the dry docks available for the use of His Majesty's Navy. The Merewether dry dock at Bombay, the No. 1 dry dock at Hongkong, and the dry dock No. 3 now under construction at Singapore are 500 feet long on the floor, or 200 feet shorter than the Colombo graving dock, while, although the docks under construction at Gibraltar and Malta are to have lengths of 850 and 750 feet respectively, they are really double docks. The depth over all of our dock at high water will be 32 feet, which also compares favourable with the depths of the docks at Bombay, Singapore, and Hongkong. The breadth of the graving dock will be 85 feet at the entrance. The longest ships in the Navy—the Good Hope class—are 500 feet long; the broadest—the King Edward VII. class—78 feet; while none draws more than $27\frac{1}{2}$ feet; the dock will therefore easily accommodate our longest and largest war vessels for many years to come. As regards merchant ships, it will take anything afloat, with the exception of the new boats on the Atlantic line, but none of these is ever likely to be seen here.

A smaller work, but one which should prove to be a considerable boon to the owners of small vessels is the patent slip. The want of a slipway for small craft has been long felt at Colombo. The absence of a sufficient range of tide makes it especially difficult to clean or repair the smallest-sized vessel. At one time it was proposed to build a slip for sea-going vessels as an alternative to the graving dock, but it was pointed out by the late Sir John Coode that a slip for vessels exceeding 3,000 tons was not practicable. The question was brought to a head when the graving dock was sanctioned. It was estimated that such a slipway would be in use for three years before the dock, and it was pointed out that in the meantime there were no means of docking the expensive Harbour Works dredgers and other craft, with the result that these vessels had to make an annual trip to Bombay, involving a very heavy outlay and a great loss of time. In view of these facts, and on its being shown that a fair revenue might be expected from the slip, the work was finally sanctioned in 1898.

The slip which has cost about Rs. 635,000 was practically completed at the end of 1902. It is capable of dealing with vessels up to 1,200 tons weight, and will be a valuable adjunct to the graving dock. All vessels above 1,000 tons will use the dock, leaving the slip for smaller craft.

An interesting feature in connection with the harbour works is the increase in the "reclamation area." Prior to the commencement of the present works in 1894 the reclaimed area was $38\frac{1}{2}$ acres: it is now $82\frac{1}{2}$ acres, and there only remain some 12 acres still to be reclaimed. Of the $82\frac{1}{2}$ acres, an extent of 24 acres has been allotted for coaling ground, and the existing coal sheeds will ultimately be removed there, the site of the latter being probably used for Customs and warehouse accommodation. The Admiralty is also entitled to a part of the area to be reclaimed between the graving dock and the north-east breakwater, and the use to be made of the remainder has not yet been decided, but the time has come when it should be taken into consideration.

The property which the reclamation works have thus created for Government is very valuable. The data on which the rate of rent was originally fixed have constantly fluctuated with the gradual development of the resources of the harbour and the location of the several allotments. The lease of the lots on the old reclamation was settled, in more than half the number of cases, so far back as 1884 and 1889, and the leases run on to 1916. The average rate of rent appears to have been less than Rs. 1,500 per acre per annum; while the average for the new reclamation, so far as the settled leases are concerned, may safely be put down at Rs. 7,000. Taking this rate as a basis, and capitalizing it at, say, 5 per cent., the reclamation grounds, in their entirety, may be valued at Rs. 140,000 per acre; and this cannot be considered excessive in view of the operations in connection with the harbour. At present a sum of Rs. 66,200 per annum is realized by the lease of 9 acres of the old reclamation, $4\frac{1}{2}$ acres of the new reclamation, $2\frac{1}{2}$ acres of the reclamation adjoining the barge repairing basin, and other lands, gardens, and buildings in connection with the extension of the harbour and graving dock, but it will be seen that in a few years' time a very much larger yield may be expected and a very profitable source of revenue will be assured.

In connection with the harbour extension works, and in order

to utilize fully the additional area enclosed by the new breakwaters, thirty new sets of moorings have been provided at a total cost of £20,000 sterling. Sixteen of these are now in position, and the remainder are in course of being screwed. It is hoped that most of them will be in position by April or May next. The length of the vessels now calling at Colombo being very much more than it was in 1896, it was found necessary to lengthen some of the berths, and accordingly there are now eight berths of 750 feet in length in the north-east monsoon and nine berths in the south-west monsoon able to accommodate the longest vessels likely to call here.

Last year it was decided to provide the port with two steam tugs, as it was realized that the gradual completion of the north-west breakwater, and the consequent narrowing down of the entrance to 800, and possibly 700 feet, would render the piloting of vessels in and out of the harbour without the assistance of such tugs a matter of difficulty, and involve much loss of time. Meantime these vessels have been found very useful in berthing and unberthing large vessels, and it is estimated that their assistance saves as much as twenty minutes in an hour. Their usefulness in this respect is best exemplified in the case of large modern men-of-war, which, unlike merchant vessels, being fitted with in-turning screws are incapable of being manœuvred in a limited space, and it is found that at least an hour to an hour and a half is saved in berthing them with the help of the tugs.

At the close of the first half of this year the total amount expended on harbour extension works had amounted to about 19 millions of rupees, but the total appropriations up to date for works to be paid out of the Harbour Loan amount to over 24 millions of rupees, and as the apportionment to the Harbour Works from the loans of 1892, 1893, and 1900 falls short of this total by about $5\frac{1}{2}$ millions, it will be necessary to find this amount to meet the cost of all works at present sanctioned. It is estimated that when the present works are completed a harbour revenue of about Rs. 1,877,000 will be required to meet all charges in connection with the harbour, including interest and sinking fund on an additional loan of this amount. Now, the estimated revenue for 1903, according to the latest calculations, is Rs. 1,701,292, so that, even if an additional loan had to be

raised to-morrow, there would only be a deficit of about Rs. 176,000. But the sanctioned works will not be completed till 1906, and by the time the full charges on the new loan—assuming it is necessary to raise one—become payable we may confidently expect to have a new and lucrative source of revenue in the graving dock, while the natural expansion of trade should bring in an enhanced revenue on account of harbour dues, pilotage, warehouse rent, and so on.

The great and costly works which I have described have, I think you will agree, been generously conceived and promptly and energetically carried out. And yet doubts have been expressed whether even the increased harbour accommodation, after all the works sanctioned have been completed, will be sufficient to cope with the increasing traffic. Advantage was therefore taken of Mr. Matthews' visit to the Island in the early part of last year to invite him to report on a scheme of extended accommodation. He accordingly prepared two rough sketch designs, one for an outside harbour, extending the present closed area, and the other for an inland dock near Mutwal. The inland scheme appearing to be the more feasible of the two, Mr. Matthews was asked to submit a report and design. To enable him to do this it was necessary to have the site of the proposed dock accurately and minutely surveyed. This preliminary work, the cost of which was estimated at Rs. 120,000, has already been completed, and the survey is now in the hands of the Consulting Engineers. They are not yet in a position to submit an estimate of the cost of the scheme, but it will certainly be very large; nevertheless the expenditure will possibly have to be faced in the future. By the time the present Harbour Works are completed you may have sufficient data at your disposal to enable you to decide the question, but the approaching construction of the Panama Canal, which will probably draw away part of the traffic to China and Japan, is a factor which will have to be reckoned with.

There is another project which, if finally carried into execution, will possibly affect the shipping trade of Colombo to a small extent. I refer to the proposal to cut a canal across the island of Rameswarm, which would enable vessels bound for Madras and Calcutta and ports on the east coast of India to avoid the detour round the south and east of Ceylon. As to the extent to which

such a canal would divert traffic from Colombo, the general opinion appears to be that there would probably be an inducement to some tramp and rice steamers to coal at Rameswaram, inasmuch as coal and labour might be cheaper there. Much, however, would depend on the amount of the canal dues: if they were appreciably higher than Colombo harbour dues, the canal would probably be avoided rather than used.

Before leaving the subject of the harbour I may give you a few details as to the progress made in the Master Attendant's Department.

As I have stated, the original estimate of harbour revenue for the present year is Rs. 1,649,150, or an increase of nearly 50 per cent. on the revenue of 1896. Harbour dues have risen from Rs. 833,669 to Rs. 1,175,000, and single warehouse rent from Rs. 200,000 to Rs. 300,000, but the largest proportional increase is in pilotage fees, which now bring in Rs. 130,000 as against Rs. 57,445 in 1896. This increase is chiefly due to the fees having been raised in 1900, as it was found that the old rates were very low when compared with the rates of other ports. Even now it may safely be said that the present rates compare very favourably with the rates charged at other ports, considering the great facilities afforded to vessels calling here.

The returns of the Master Attendant relating to the number and tonnage of vessels calling at Colombo furnish striking proof of continued rapid expansion. In 1896 the number of vessels, excluding native craft, that called at Colombo was 2,144, and their tonnage 3,760,705. Last year the numbers were, vessels 2,654 and tonnage 6,981,584. Compare this with the increase during previous periods. During the seven years 1883-1889 the figures rose from vessels 1,027 and tonnage 1,618,264 to 1,347 and 2,501,665 respectively. By 1896 they were, as we have seen, 2,144 and 3,760,705, and last year 2,654, and 6,981,584. In other words, while the increase in tonnage for the period 1883-1889 was about 35 per cent., the increase during the period 1896-1902 was almost 50 per cent. It may be interesting to note here that the total number of vessels which entered all the ports of the Island in 1902 was 3,418, of which 2,867 or 83 per cent. flew the British flag, the proportion of British tonnage, however, being only 70 per cent. Germany comes next, with only 5 per cent. of

the number and 13 per cent. of the tonnage, France being third with 3 per cent. of the number and a little under 6 per cent. of the tonnage. The Japanese are not far behind, with nearly 5 per cent. of the tonnage, and their numbers are steadily increasing.

There has been an even more remarkable increase in the number of vessels calling at Colombo for the purpose of coaling, the figures being for 1896,384 vessels with a tonnage of 794,199, and for 1902,610 vessels with a tonnage of 1339,945. There do not appear to exist any accurate statistics by which we can safely compare the extents of the operations at the various coaling stations in the Empire, but we can gain some idea of the magnitude of our coaling trade from the amount of coal imported and exported last year at Colombo. It is estimated that 575,824 tons of coal were imported and 568,854 exported, and I think it will be found that there are few coaling stations at which these figures have been largely exceeded. The fact that every year on an average nearly 9,000 tons of coal are saved from the harbour affords an interesting side-light on the extent of our coaling operations.

IRRIGATION.

At the inauguration of British rule in 1796 almost all the large irrigation works throughout the Island were in a state of ruin, and the village tanks throughout the low-country had either been destroyed or served their purpose to a very small extent. Even for fifty years after that date various causes prevented any attempt being made to restore the ancient works, and practically nothing was done till Sir Henry Ward assumed charge of the Government in 1855. The notable tour which he made throughout the Island (followed by his memorable minute) has passed into history. The outcome of his energy was the commencement of a magnificent series of irrigation works in the Eastern and Southern provinces, and the establishment of a special and separate staff to carry out and superintend these works.

At the time the Matara works were completed in 1880-1881 the period of depression due to the coffee leaf disease was commencing, and consequently expenditure on new irrigation works partially ceased until Sir Arthur Gordon became Governor. From the very commencement of his administration he earnestly strove to revive the interest in paddy cultivation by more

extended and systematic action on the part of Government in developing the irrigation system of the Island. The long and careful consideration which he devoted to the subject took practical shape in the provisions of Ordinance No. 2 of 1887, which established local irrigation boards in each province, with a Central Irrigation Board in Colombo, and which also legalized the appropriation of a quarter of the proceeds of the grain tax for expenditure on irrigation works.

Before, therefore, I could feel justified in embarking on any new scheme of extensive irrigation works it was clearly necessary to amend this state of affairs, to bring the provincial boards into closer touch with the Central Board, and to strengthen the Central Board by the presence of a skilled adviser with practical knowledge of the various schemes submitted for its consideration.

To secure these desirable results I decided, after personal consultation with the Government Agents, to revive the Irrigation Department, and to constitute it as a branch of the Public Works Department, with Mr. Henry Parker as Irrigation Assistant to the Director of Public Works.

Irrigation affairs being thus rescued from the policy of drift into which they had been in some danger of falling, I found myself confronted with the important question. Should the Colony increase its fixed annual contribution to irrigation? By a happy coincidence the development during the years from 1895 to 1899 of an efficient Irrigation Department synchronized with a period of financial prosperity unparalleled in the history of the Colony. It also coincided with a progressive policy in the construction of new railways, and the most important of these was to run through wide tracts of land for the development of which irrigation was essential.

The adoption of these important proposals afforded a fitting opportunity for the final separation of the Irrigation Branch from the Public Works Department, and the formal establishment of a distinct Irrigation Department. This change was accordingly effected in 1900.

The result of the above changes is that the survey, design, and construction of all new works, together with the maintenance of existing large works, including their repairs, are carried out by the Director of Irrigation and his staff. The Government Agents, with

the officers employed under them, are concerned solely in securing that the restoration and upkeep of village works are carried out by the villagers themselves in a proper manner and without unnecessary expense to Government.

The officers under the Government Agents being now capable of making surveys and taking levels, can, when, as is frequently the case, it is necessary to provide village tanks with masonry spills or sluices, make the necessary surveys, from which the new works required are designed in the office of the Director of Irrigation. The Director of Irrigation, after sanction of the estimate for such works, either appoints a special officer to superintend the construction, or issues such instructions that the work can be done by the staff under the Government Agent.

For the purpose of carrying out the new policy it became necessary to appoint a number of trained engineers and inspectors to the staff of the Director of Irrigation, and to increase the number of superintendents of village tanks (or irrigation inspectors and sub-inspectors, as they are now called), who comprise the staff under the Government Agents.

I now proceed to give you some account of the larger projects for which the Colony agreed to set aside five million of rupees. Let us see how this large sum is being spent. The Director of Irrigation has furnished me with a list of eighteen principal works which have been completed, begun, or sanctioned since 1900. Two of the greatest undertakings, the restoration of the Giant's tank and Minneri tank, capable of irrigating 20,000 acres and 15,000 acres respectively, have already been completed. Six more of the works will be completed before the end of this year, including Kanthalai and Tissa; another three will be finished next year, including the Rugam and Sagaman schemes in the Eastern province, and the Walawe channel in the Southern province. As regards the latter, an extension is contemplated in the shape of a new channel on the left bank of the Walawe-ganga. The extent of land to be served is about 10,000 acres, and its quality good. It is hoped the important Vakaneri work will be completed in 1906, and a commencement has been made with the great works at Karachchi (Northern province), Nachchaduwa (North-Central province), and Unnichchai (Eastern province), the two former of which will irrigate 20,000 acres each and the latter 19,000. Two

only of the eighteen works which have received sanction have not yet been begun, Maha Galkadawala and Pattipolai-aru. On the completion of these eighteen works, which are estimated to cost something like Rs. 5,067,505, over 162,000 acres (250 square miles) of land, which is mostly at present jungle, will be added to the irrigable land in the Colony, at a cost, allowing for the completion of all schemes, of about Rs. 35 per acre for construction charges.

When these 162,000 acres of irrigable land are cultivated with paddy, sown, say, at 2 bushels per acre, and yielding on an average ten fold, they should produce 3,240,000 bushels of paddy, or 1,620,000 bushels of rice, for one crop. A considerable portion of the land should produce two crops and give a higher yield than ten-fold. The imports of rice in 1901, according to the report of the Principal Collector of Customs, were barely 9,000,000 bushels, while the total area under paddy cultivation was, from the Blue Book return, 670,438 acres, yielding probably 6,250,000 bushels of rice. The total quantity of rice used in the Island during that year was therefore 15,250,000 bushels. It would thus appear that if the whole 162,000 acres of new land are cultivated only once yearly, it will yield $10\frac{1}{2}$ per cent. of the amount now consumed, or 18 per cent. of the amount now imported.

The annual charges recoverable from these great works will be Rs. 237,500, of which amount Rs. 49,500 will be required for their maintenance, while the balance Rs. 188,000 will represent interest on the total expenditure of the completed works. Apart, therefore, from the benefits arising from the increased productiveness of the land under the restored tanks there should be a direct return to Government of about $3\frac{1}{2}$ per cent. on the capital expended.

The question naturally arises: What is the annual cost to the Colony of this new policy towards irrigation? So far it has not been necessary to utilize any borrowed money, the amounts required for the three and a half years' work since the inauguration of the policy having been found from revenue. The cost to revenue during that period has been about Rs. 700,000 a year. Previous to the formation of the Irrigation Department the total contribution from revenue was Rs. 200,000 per annum. When loan money begins to be utilized, the annual cost of the special irrigation works will consist of the charges—interest and sinking fund—on the Rs.

2,500,000 borrowed. These charges will amount to Rs. 100,000 per annum.

The sum spent on construction, improvements, &c., up to the 31st July, 1913, is Rs. 1,559,836. Now the Secretary of State has ruled that it is only such expenditure—*i.e.*, expenditure on new works, improvements, special repairs and surveys—that is to be charged to the special sum of Rs. 5,000,000. There was therefore at the end of July of this year a balance of about Rs. 3,440,000 left, of which Rs. 2,500,000 is represented by borrowed money. I estimate that this amount will cover the cost of completing the eighteen sanctioned works, and also the cost of effecting the necessary special repairs, surveys, &c., which may legitimately be charged to the special fund. In the meantime, in accordance with the decision of the Secretary of State, you must continue to provide from revenue the comparatively small sum necessary for the Irrigation Establishment and the maintenance of existing works, in the same way that a definite amount was previously set aside every year for irrigation purposes.

Take, for instance, the Giant's tank in the Northern province, the restoration of which has just been completed. The tank itself has a bund of $9\frac{1}{4}$ miles, and has been restored to hold up 10 feet of water at the sluices: it has an area of 4,425 acres and a storage capacity of 1,046,000,000 cubic feet, which, with the aid of the village tanks which are fed through its sluices, renders irrigable an extent of about 20,000 acres. There have been actually cultivated during the past two harvests 11,000 acres, all of which have paid an irrigation rate of Re. 1 per acre for 1902. The return in this case has been the most rapid of any irrigation work yet constructed in Ceylon, and there seems every reason to hope that it will continue to increase in an equally satisfactory manner, for, notwithstanding certain statements to the contrary, most encouraging reports have been received showing that the cultivators have readily paid the water rate and thoroughly appreciate the benefits which the completion of the work has conferred upon them. The tank is capable of further enlargement, and there is little doubt that very nearly 40,000 acres will ultimately be irrigated by it.

I have already described the magnificent chain of tanks which is being constructed from Kurunegala to Elephant Pass, and have ventured to predict that the immigration which will follow the

completion of these great irrigation works will dispel the gloomy anticipations of those who lay stress on the desolation of the country traversed by the Northern railway. I will now, therefore, only invite your attention to the results, present and prospective, in the other parts of the Island where large irrigation works have been undertaken, namely, the Eastern and Southern provinces.

The natural features of the Eastern province afford unrivalled facilities for the irrigation of the low-lying land in that district. Several ranges of minor hills running generally north and south between the higher mountains in the centre of the Island and the sea afford numerous opportunities for intercepting and storing the rainfall of the north-east monsoon, which is driven at such an angle with the mountain ranges as to admit of the potential storage of practically the whole of the north-east rainfall. This rainfall is brought down from the centre of the Island by the Mahaweli-ganga and other rivers, and is a factor of inestimable value in the development of the fertility of the soil in the Eastern province.

The advantage of these natural features was known to the ancient Sinhalese kings, as well as to the Dutch, but first received attention by the British Government in the time of Sir Henry Ward in 1857.

The finest works undertaken are the new tanks of Vakaneri and Unichchai. The latter has only been begun this year, but it is hoped the former will be complete by 1906. These two tanks alone will serve an area of 32,000 acres. As the result of these and other works inaugurated during the last seven years paddy cultivators in the province will be enabled to export from it within the next two decades some 700,000 bushels a year, or over ten times as much paddy as that exported at present, after due allowance has been made for the increase of population. The area irrigable under all the works as now restored is over 7,000 acres; altogether 6,331 acres of land have been sold since the commencement of the work, and much of the "impenetrable jungle" described by Sir H Ward has been converted to cultivated land. The influx of population has been most significant. Between 1881 and 1891 it more than doubled itself, rising from 473 to 1,016, while by 1901 it had still further increased to 1,286. That this rate of increase is likely to be steadily maintained is clear from the demand for land at Tissa, which is so great that the price has

reached Rs. 80 per acre, and 2,500 acres are already cultivated with paddy. The difficulty as regards want of population has, in fact, now been completely overcome and the scheme, which was regarded as so unpromising in 1870, is now justly considered one of the most successful irrigation projects executed in the Colony.

I have now completed my task of reviewing the history of irrigation in this Colony in the past. I have also given you some details of the work that is now being done and of the beneficial results which are following that work. It only remains for me to indicate, as shortly as I can, what further works appear likely to deserve your consideration in the near or remoter future. For, Gentlemen, the present programme, comprehensive and generously conceived as it is, by no means exhausts the opportunities for irrigation in this Island. There is hardly a province in which there is not some ancient tank worthy of restoration, or where there is not some fine river whose water properly utilized would change the face of the surrounding country.

I do not say, Gentlemen, that all these schemes will ultimately be carried into execution. Two of the most important tasks which will devolve on my successor will be the completion of the present ambitious programme and the careful examination of the respective merits of the schemes I have just sketched. I am pleased to think that in taking up these tasks he will have, for the first time in the experience of any new Governor of Ceylon, the assistance of a fully equipped and highly efficient Irrigation Department, and I am confident that he will have no difficulty in continuing to enlist your generous sympathy and support in the furtherance of that liberal policy of irrigation which has been inaugurated with such promising effect during the last few years.

SURVEY.

I pass on to the Survey Department. There is no branch of the administration to which I attach more importance, or in which I have taken greater interest. I need hardly point out how essential it is that the Administrator who seeks thoroughly to understand the multifarious questions of the Colony he is called upon to govern, should find the country properly mapped; and that he should know the exact position of the roads, rivers, communications, and productive areas of the land with which he has to deal.

When, however, on my assumption of office I called for an

accurate map of Ceylon there was none available, and it further appeared that there was no prospect of any ever being available unless the system then in vogue was radically changed.

For this state of things no one was to blame. The explanation was to be found, as I have already observed, in the rapid progress of the Colony and the consequent large demand for land, resulting in a bad system of expensive isolated Application Surveys, which taxed the whole capabilities of an under-manned department.

The initiation of these important undertakings necessarily involved a complete re-organization of the whole department, both as regards the staff and system of working. In the first place, the Superintendents had to be carefully instructed in their new duties, and surveyors trained, without increasing the staff. During the years 1897-1902 the department trained and put in the field no less than 105 surveyors. It might naturally be supposed that whilst training so large a number of men the outturn of the department could not increase. This has not been the case, for the improved system of work in all branches enabled the Surveyor-General to push on with the surveys and plans *pari passu* with training the surveyors. Let us compare the output of the last six years with the previous period 1891-1896, so that we may form some estimate of the benefit the Colony has derived from the new policy. For the period 1891-1896 the total outturn of the department was 470,492 acres of isolated surveys at a cost of Rs. 2,711,315. During the following period of six years 1897-1902 the outturn of the Block Surveys was 1,187,225 acres, Application and Special Surveys 274,809 acres, and Topographical Surveys 9,638,407 acres, *i.e.*, a total of 11,100,441 acres, or more than twenty-three times the area surveyed during the previous period; yet the cost has risen only to Rs. 3,593,569, or about 33 per cent. Thus the forecast I made when addressing you in 1896, that "the output of work per man would be four times as large as it now is, and that the average cost per acre would be one-fourth the present average cost rate," has been far more than justified.

Although the Block Survey parties have thus already surveyed and mapped an appreciable proportion of the total area to be dealt with under this system, there still remains, as I reminded you last year, much to be done. But, as I then explained, there are considerable difficulties in the way of expediting these Block Surveys.

Even if it was considered justifiable to incur the large additional expenditure which would be necessary to meet the cost of an increased staff of surveyors, draughtsmen, and supervising officers, little progress could be made for several years, as the new staff would first have to be trained. I mentioned last year that there was an alternative to the increase of the department staff, namely, a Block Survey by contract. That proposal has been very carefully considered, and I cannot say that the objections to it are insuperable. But for the present, at least, there is no pressing need for further expediting the work of the Block Survey party. The immediate utility of the work of the field surveyors is bounded by the capabilities of the staff in the office, and action on the plans completed by the latter in their turn is limited by the capacity of the officers whose duty it is to settle the lands appearing on those plans. It is found that the present output of work in the field more than suffices to keep the office staff occupied, while there is an ample number of plans forthcoming to supply material even for the enlarged Land Settlement Department, to which I shall presently have occasion to refer.

Plan work and mapping have both increased in volume and improved in quality, the latter particularly, and if they have not quite kept pace with the largely increased outturn in the field, it is due to the fact that more space and better appliances were required than were available.

The Triangulation Survey demands a word of notice. In 1896 it was in a very incomplete state owing to want of funds and the spasmodic manner in which the work had been undertaken. In particular, three large blanks were still left untouched, the largest of which, on the north-west of the Island, extended over an area of 3,600 square miles; another, about 1,700 square miles in size, being situated in the south; and a third, to the north-east, comprising about 1,600 square miles. The existing triangulation required "breaking down" into smaller triangles, so as to be available for the purposes of Block and other Surveys. The largest area dealt with was the north-west coast scheme. The whole country between the sea and Anuradhapura and Chilaw and Marichchikaddi had to be covered with a series of triangles with the object of joining the main principal central chain to the northern chain of triangles, which forms the connecting link between

the Ceylon and the Indian triangulations. The work was carried out under great difficulties. The timber required for stage building was frequently dragged long distances. Water was scarce, and had to be carried far by coolies. The officers engaged were often hampered by sickness amongst their following. In spite of these difficulties the scheme has been carried out as originally designed, and 3,600 square miles have thus been disposed of. The other blanks have been filled in an equally satisfactory manner, and in a little more than five years nearly 10,000 square miles have been covered by the Trigonometrical Surveys, at a trifling cost compared with expenditure on such work in the past. The triangulation performed up to date has covered two-thirds of the Island with a network of principal and secondary triangles, while more than half has been closely covered with minor stations, thus furnishing a sufficient number of accurate points of reference for the location of surveys.

The numerous Application Surveys, which were for so long a period the great obstacle in the way of legitimate survey work in this Colony, still constitute a heavy tax on the resources of the department. In the early years of my administration an attempt was made to grapple with the problem by delegating this work to licensed surveyors, but the system unfortunately proved impracticable, and it was found necessary to revert to the practice of employing officers of the Survey Department. The work is important, and arrears in this branch may mean large financial loss to the Colony, for delay in Application Surveys is not only unfair to the applicants who have deposited fees, but it involves a loss of the revenue produced by land sales, and, what would be peculiarly unfortunate at the present time, it checks the development of the country. It was accordingly determined in 1900 to permanently allocate half the existing staff to Application Surveys, and it is satisfactory to record that this branch is now clear of arrears both in the field and in the office. Especially gratifying are the results of their labours disclosed by the land sale returned.

As to the Topographical Survey, maps of nearly all the north and east of the Island, about 15,000 square miles, have been published, enabling the officers of the new Irrigation staff to enter on their duties with some confidence, for, instead of having to

depend on guess work, as their predecessors often had to do, they have all the information that can be supplied by a good topographical map. This should accelerate as well as largely reduce the cost of irrigation works, besides enabling Government to decide with confidence as to the works to be taken up.

In connection with the Topographical and Block Surveys I may mention one feature which the Surveyor-General characterizes as the greatest boon ever conferred on his department, namely, the introduction of the Indian system of recess quarters for the surveyors. According to this system—which was one of the most important of Colonel Holdich's recommendations—the surveyors, instead of reducing their field sheets to fair mapping in the field amid the discomfort and unhealthiness of camp life, generally in malarious jungles, reserve this part of their work for about four months, from October to January, when they are withdrawn from the field and “recessed” in some central place where they can carry out their plan work in comparative comfort and freedom from interruption, and also under strict supervision.

The position and prospects of the supervising staff of the Survey Department have been materially improved during the period of my administration.

In concluding my review of the Survey Department, I rejoice to be in a position to present to you, for the first time in the history of the Colony, an accurate topographical map of Ceylon. The 8-mile map which the Survey Department has just completed shows all the principal and minor roads, and, as far as the scale will permit, paths and jungle roads between places of any importance; also rivers, canals, resthouses, and the large tanks, mountains of any size in the plains, the mountain zone generally, railways, provinces, telegraphs; in fact, all that can be shown on the scale without making the map indistinct or unsightly. The successful accomplishment of this laborious task before the close of my term of office has afforded me great pleasure, and is a legitimate cause for congratulation to a department which has made signal progress in every direction under the able and energetic direction of Mr. Grinlinton. I am confident that the publication of this map will prove a boon, the far-reaching administrative effects of which it would be difficult to over-estimate.

THE HINDU WOMAN.—IX.

The great inclination of the females of the West towards Fashion has caused a great disturbance in society in that part of the world. It has become very difficult on the part of men there to meet their whims and fancies. So many are their requisitions, and men have to spend so much to comply with the same that married life has become in the West a curse instead of a blessing. Like chameleon, Fashion changes its colour always. Today a man prepares a suitable dress of a costly nature for his consort: but lo! Fashion changes the next day. The costly dress thus becomes useless, and another suit according to the new fashion must take its place. This mania for dress is not confined to the rich. It is seen among people of all classes and conditions. It induces men of the upper classes to incur debts and those of the lower classes to adopt sinister means to gain money. And, that dress gains the ascendancy which shows the beauty of the women to advantage, even at the sacrifice of decency. This inordinate love for dress has led to such bad results that it has been considered necessary by the sensible men of the West to take steps to curb it. Some years ago, a Society was established in England with this object in view. It was called "the Woman's dress Guild."

We are not aware whether this Society is still in existence, but, at its first meeting the following resolutions were passed:—

1. That the present style of women's dress is contrary in many respects to good taste, honesty and propriety.
2. That the passion for dress is a frequent cause of sin, leading the lower classes to theft, the tradesmen to dishonest practices and the upper classes into debt.
3. That many of the popular fashions are not only unbecoming but actually injurious to health.
4. That a Society shall be formed, which has for its object to deal with the subject of women's dress, as far as possible, and

that it shall instil the principles of beauty, propriety and moderation by example of the members as well as by every other means in its power.

In the civilized countries, fashion assumes different forms. It is a fashion to go to theatres and other places of amusement. It is a fashion to read novels and love-tales of an indecent nature. And, to crown all, it is a fashion to court the attention and flattery of men ignoring the rules of married life. It is certainly very hard for men to pass their time with consorts who would force them to incur debts in order to supply them with costly furniture and dress, and all the same time, see them resorting to their male friends ignoring the duties they owe to them as compartners in life. In such a society it is not a wonder if we find sensible men not inclined to lead a married life, but to pass their lives with their female friends.

In the year 1871, an unique paragraph appeared in an issue of the *Indian Mirror*: but, considering the state of society we have described, its appearance is not wonderful. It is this :

"It is the prevailing opinion amongst a large class of philosophers of the school of Bentham and Mill, which holds the advisability of contracting temporary marriages or Persian marriages (*nicca*) properly so called. A bill has been submitted to Parliament by an M. P. for legalizing such marriages."

It may be said that, this was the state of society in England several years ago and that things have changed for the better. But such does not seem to be the case. Not long ago, the *Saturday Review* in an article headed "Young married women," thus gave out: "In Society, there are many young married ladies who seem to think that their whole duties in life consist of "going out" as much as possible, no matter what their husband's means may be, and what bills they may run up at their dress-makers' and milliners'. They are eaten up entirely by the craze for society and it does not seem to enter into their brains that they have duties as wives and mothers". * * "Let it but be known that there is a book out that is hardly decent, and the rush for it is immense among our young married ladies, and even among some of the elder spinsters. Indeed, not to have read any book that is more indecent than usual is to be out of the fashion." * * To evince a decided preference for their husbands over other men is

antiquated and out of date ; and if a real affection exists in the present phase of society, great care must be taken to hide it absolutely, except when the young couple are quite alone. It would be absurd, of course, to say that all women are alike and that none of them are sensible and good wives who accept the flattery of men at what it is worth ; but there is still this lowering tendency in society of the present day, and there are many nice young married men who get their heads turned by the attention they receive."

The present condition of the fashionable ladies of the West should be a warning to our women. The sight of the European ladies residing in India dazzles the eyes of our forward women, and they try to imitate them. Some of them are seen putting on the apparel of English ladies. Our so-called educated men do not wish to see their wives wearing the antiquated *Shati* and marking their foreheads with vermillion. As they themselves ape the *Sahabs* they wish to see their consorts dressing like the *Mem Sahabs*. A woman reading love-tales, sewing a fashionable cap and joining with her husband in in jovial parties is considered to be a model wife. And, it is this inclination on the part of our advanced men to make their wives fashionable that is leading to the evil result complained of. It is satisfactory to notice that, beyond Bengal this mania for fashions is not much visible. It is not the case even in some of the advanced countries of the West. In Germany, for example women are generally very prudent. They perform domestic work like their sisters in India and take a very great interest in the welfare of the family. In England too, sensible women who look to the interest of the family are not wanting. We have already given a sketch of a well-conducted family in that advanced country.

We will now deal with the last point of this paper, *vis.*, Liberty in taking occupations hitherto monopolised by the male sex. In the advanced countries of the West, women are seen competing with men in several positions of emulation and trust. They fill up the places of clerks, signallers, press-readers, printers, ship-assistants &c. In the higher sphere, they take up the positions of lawyers, physicians, preachers, journalists, artisans and Professors of Colleges. Not long ago, a lady of America

competed for the post of the President of the United States. In the year, 1897 Mrs. Cannon of Utah was elected a Senator of the United States, and Lady Aberdeen, wife of the Governor-General of Canada, Convocation Orator at the University of Chicago.

There is no reason why women should not hold responsible positions if found qualified to so. They are justified in claiming their rights as human beings and there is no reason why the same should not be conceded to them. It must be admitted that man has, to a great extent, robbed them of their rights, and it is but meet that justice should be done to them. But, whilst recognising the rights of women, it should be considered that by nature they are debarred from occupying certain positions. In dealing with the question of French education, we endeavoured to show that high education impaired the health of girls to such an extent that they became incapable of discharging properly the duties of mothers and giving birth to healthy and strong children. The same may be said with regard to women holding positions which require the strength and energy of man. Generally speaking, a woman should be a ministering angel to man. She should lighten the burden of her husband and make the family happy and cheerful. She should nourish her children properly, and by her advice and example, make them useful members of society. The cessation of her connection with the family for a greater portion of the day signifies a great dereliction of duty on her part as mother and wife. During her absence the affairs of the family cannot be conducted properly, neither can the children be nourished and the inmates of the house looked after in a proper manner. Woman is the mistress of the house and she should guide it properly.

The *Surabhi* in its issue of the 11th of August 1887 made mention of the fact that, in France, the females of well-to-do families neglect to nourish their children to a very great extent. The little ones, as soon as they are born, are made over to grown-up women in villages for the purpose of nourishment. The mothers never think of their offsprings until they are grown up when they are sent to the families. The result of this is lamentable. It is stated that many of these children do not survive, and that in villages, most of the tombs erected are for children. This is the sad result of woman not doing the work she is bound to do.

Nature has provided a spring of milk in her breast from which she is to assuage the hunger of her child. Moreover, that care which the mother would give to her child cannot be expected from any one else.

Our remarks apply, of course, to the women who have children to rear up. But, there are in the West saintly women who have not entered married life. They have, of course, every right to hold occupations which their abilities may enable them to occupy. In fact, many of them do philanthropic work. These women are emblems of purity. They are called "sisters of mercy." We have already made mention of their benevolent deeds. They need not be recapitulated here. In ancient India, there were *Brahma Vadinis*, who never married. They passed their lives in religious pursuits.

At the present time, according to the custom in vogue, a father is bound to marry her daughter, so that, grown-up maids are not seen in the Hindu community. But, there are widows for whom occupations should be found. Those belonging to rich families pass their lives comfortably occupying themselves with religious pursuits. They can extend their sphere of action and serve as "sisters of mercy" like their sisters of the West. Those who are helpless may work as *Panditas* for the female schools referred to in the first part of this paper, or perform *Kathuka'a* for the edification of the members of the female sex, getting remuneration for their work. But these two occupations would not be sufficient to employ all the helpless widows. The establishment of schools of industrial arts for females is therefore necessary. It should be in charge of an accomplished Hindu lady if available, or any other respectable person. In this school, women should be taught such handicrafts as would suit their capacities and which would enable them to earn a respectable livelihood.—At present, our poor widows lead miserable lives. They depend on the charity of others which in many instances precarious. It is, therefore, incumbent on our well-to-do brethren to come forward and take steps towards the establishment of such schools in different parts of India.

We have dealt with all the points set forth at the outset. It is said that Hindu women are harshly treated. Let us say some-

thing about this. In the first place, we will give the injunctions of the *Shastras* on the subject. The *Mahavirvana Tantra* says:

ধনেন বাসনা প্রেমো শ্রদ্ধয়ামৃত ভাষণৈঃ ।

সততং ভোষয়েদারান্ নাঙ্গিয়ং কচিদাচরেৎ ॥

A man should always satisfy his wife with money, apparel, love, regard and sweet words. He should not do anything unpleasant to her. The *Manu Sanhita* says:—

সম্বন্তো কার্যায় ভর্তা ভর্তা ভাৰ্য্যা তৈব চ ।

যশ্চিৎসেব কুলে নিত্যং কল্যাণং তত্রৈব ধ্রুবম্ ॥

That family is sure to prosper in which a wife is satisfied with her husband and a husband satisfied with his wife. Again:—

যত্র নার্যাস্ত পূজ্যন্তে রমন্তে তত্র দেবতাঃ ।

যত্রৈতাস্ত না পূজ্যন্তে সর্বাঃ ক্রাফলাঃ ক্রিয়াঃ ॥

That family is favored of the deities in which women are respected but that family in which women are not respected fails to reap the fruits of the religious ceremonies performed by it.

The injunctions of the *Shastras* are very clear. We will now see what treatment Hindu women actually receive. There is a ceremony among us called *Bhratri dviya*. On this occasion, sisters pray for the long life of their brothers and entertain them with good things and the latter make presents to them, the younger bowing down to the elder and the elder blessing the younger. In the Deccan, there is a custom which goes by the name of *Stri adar*. On this occasion, husbands satisfy their wives with ornaments or money. In Bengal, when a bridegroom goes to the house of his father-in-law the first time, he is required to show special reverence to the females of the house and to make them presents. At the time of his daughter's marriage, the father has to show reverence to the female members of the house of the bridegroom by presenting them with clothes suited to the positions they hold in the family. When, after marriage, a girl comes to the house of her husband, the relations and friends of the bridegroom come to see her in all eagerness and present her with ornaments or coins of gold or silver. Great rejoicing takes place at the house of the bridegroom. The bride at that time becomes the observed of all observers. And to crown all, a ceremony is performed, called *Bou Bhat* in recognition of the bride's admittance into the family. On this occasion, a grand feast is given to friends and neighbours. Similar reverence is

shown by our Hindu brethren in other parts of India to their females, although the method in which it is done is different.

It is evident from the above that the Hindus treat their women in a proper manner. Instances now and then come to our notice, of matrons treating their daughters-in-law harshly. But, these are exceptions, and no notice need be taken of them.

We have endeavoured to show that our women have no special reasons for complaint. It must, however, be admitted that there is much room for improvement among them. The real well-wishers of our country are alive to the importance of this subject, and they are in earnest about it. But, we do not wish to have the veneer of the so-called civilization of the West that exhibits a polished exterior but conceals its ugliness. We want that civilization that would elevate the minds of our females. We would like to see among us Sita and Savitre, Damayanti and Gandhari, and not the girls of the period who would lead lives of dissipation, and trample under foot all that is noble and godly.

D. N. G.

ON THE INTERPRETATION OF THE VEDAS,*Ita Scriptum est.***I.**

When we read a Greek tragedy our first care should be to realize to ourselves the Greeks i. e. the men who live half naked in the gymnasias or in the public squares, under a glowing sky face to face with the most noble landscapes bent on making their bodies nimble and strong; on conversing, discussing, voting, carrying on patriotic pyracies; but for the rest, lazy and temperate, with three urns for their furniture two anchovies in a jar of oil for their food, waited on by slaves so as to give them leisure to cultivate their understanding and exercise their limbs; with no desire beyond that of having the most beautiful towns, the most beautiful processions the most beautiful ideas the most beautiful men. And so again, in order to understand all Indian Puranas, begin by imagining to yourself the father of a family who having seen a son on his son's knees retires according to the law into solitude with an axe and a pitcher under a banana tree by the river side talks no more, adds fast to fast, dwells naked between four fires, and under a fifth, the terrible sun, devouring and renewing without end all things living; who step by step, for weeks at a time fixes his imagination upon the feet of Brahma, next upon his knee, next upon his thigh, next upon his navel, and so on until beneath the strain of this immense meditation, hallucinations begin to appear, until all the forms of existence mingled and transformed the one with the other quaver before a sight dazzled and giddy, until the motionless man, catching in his breath, with fixed gaze, beholds the universe vanishing like a smoke into the universal being into which he aspires to be absorbed.

The basis of such imagination is the remnants of ancient memory and song which formed into a history repairs the ravages of time

and supplies the want of present personal direct and sensible observation. But the Vedic period is an age where History has not yet reached its all grasping hand. History brings the past before your vision and the past becomes present; but, there is a period, as we are forced to admit, situated far, far away the limits of the modern historic scope. There is no history of the Vedic age, of the people, its manners, or the country they lived in. History explains literature by referring the sentiments of the people to their antecedents their moral character and their surroundings, but when we reach the Vedic age we feel the want of historic data and far from being able to understand their ideas, we find ourselves situated at so great a distance that the sights grow dim, hazy, indistinct as if the things were not. What principle do you think we can apply to unravel the mysteries of an existence so far removed from us? What is your first remark on turning over the great stiff leaves of a Sanskrit Puthi, the yellow sheets of a manuscript—The Vedas. This you say is unintelligible. This bears the impress of the curse of heaven—The Gods have put their seal on these books so that man shall not read them.

In the heights of the heavens, on the banks of the sacred river, in the peace of a moonlight night, the gods gave audience and the bards sang their songs. They sang from time eternal, and in course of time the bards grew old and the seers lost their sight. Time passed and the progeny of heavenly seers lost their sight too and turned to the earth, earthy; but sweating for their daily bread they wandered among hill and dale and banks and shores of streams and oceans green and one summer evening they sat amidst the tall forests of snow clad Himalayas and there they heard the old voice of heavenly music and gathered in their memories these old songs and moulded them to such form as they liked and suited them to their use, and they sang their songs tuned as they could sing, the words cut down and ideas remodelled..

We should not be surprised to see grammatical forms of a comparatively modern date used in the verses of the Sama Veda, in the place of older forms used in the Rig Veda; words of comparatively later origin used instead of the older and more hardsounding words used in the Rig Veda most of which words had at the time of even the first collection of songs lost their meaning.

The collection of ancient memories is everywhere a sure sign of growing social strength, and freedom. A collection of old relics never fails to infuse fresh vigour into youthful minds and youth creates a religion of its own. Old relics create in him a feeling of devotion to the past which gradually grows stronger and more fruitful as his surroundings thicken and darken round him. Love for the past is itself a religion keeping together the bonds of life. Freshness of youth is full of meaning. Its robust muscles appear in all its deeds and leave unmistakable marks of freedom and intelligence. Its faith is deep and strong and flows like a bounding stream over crags and rocks hiding underneath. The people who collected the Sama Veda felt a healthy freshness of life, and placed their confidence in antiquity. They collected the old songs and arranged them in such order as they thought fit to adopt to worship their god in heaven. The great god in the form of Fire they addressed by certain verses which they collected together in the first part of the collection; then they gathered the verses which adore the great god in the form of Soma, and those which adore Him as Indra. They sing, to worship the God, and they keep in their memories the various tunes to which the songs were sung. The next generation of men grew stronger in their faith in antiquity and made a keener search into older forms of grammar and thought. They felt that they were the guardians of the life of older songs: and recognized that they formed a scripture which they had no right to mutilate or alter. They recognised that their predecessors had in certain respects neglected their task and they went to their duties with greater earnestness and of the village people they asked and also of the learned men and these examined the collection of old and said as did James Kelly to Stephen Gwynn in respect of an old Irish song. "It's the same song" they said, "sure enough, but there is things changed in it, and we know rightly about them. Some one was giving it the way it would be easier to understand leaving out old hard words * * * And this day you will be able to take down what I say, let you understand it or not, just word for word, the right way it should be spoken." There is something very strangely attractive in this account, but we know it is true. After the collection of what is known to us as the Sama Veda, there followed another collection the Rig Veda. This was the age of regeneration, the age which collected all the relics

of the past. At this time, we find, were put in systematic order the customs and usages of different sects and tribes—their rituals ceremonial and anthologies. Thus we find how the Rig Veda is more comprehensive than the Sama Veda. The former collection shows very sure signs of a thoughtful arrangement. The Rig Veda presents a twofold subdivision—The one purely external and the other based on internal grounds. The former division is that into ashtakas : and the latter into Mandalas. The first and tenth Mandalas contain songs by Rishis of different families ; the 2nd Mandala on the contrary contains songs belonging to Gritsamada ; the third belongs to Visvamitra the fourth to Vamadeva the fifth to Atri the sixth to Bharadwaja ; the seventh to Vasishtha the eighth to Kanva ; the ninth to Angiras. The hymns in each separate Mandala are arranged in the order of the deities addressed. Those addressed to Agni occupy the first place, next come those to Indra, and then to other gods. This, at least, is the order in the first eight Mandalas. The ninth is addressed solely to Soma and stands in the closest connection with the Sama Veda.

All this indicates an intention to put every thing into order and a system, and we can say with the greatest confidence that this collection cannot but be the result of careful thought and premeditation. In the Sama Veda we find the hymns arranged under the names of particular deities without any attempt to any other mode of classification, but in the Rig Veda we find distinct trace of a method—or at least growth of system—a general development of intellect subordinating the man of emotion. The Sama Veda chants as did the men of older times—the Rig Veda speaks as in a home a father speaks to his son, full in its music, yet grave. Society is now putting itself into form, it is growing, and expanding in dimensions ; therefore the Rig Veda becomes necessary. One tribe conquers another, legalising and philosophising for itself,—in short it is now talking in prose, in a veritably unemotional way. People in earlier ages do not speak, they sing, or rather cry out. Each little verse of the Sama Veda is an acclamation,—nothing more ; a reflex of the external influence touching the sensitive heart. There is no art, no natural talent, for describing singly and in order the different parts of an object or an event. Here all is image ; and each event fits in with its natural surroundings ; it is almost a vision which is raised, complete, with its accompanying emotions. Mark

all the verses of the Sama Veda and you will not fail to verify these remarks. Full of sentiment, and a feeling for the past, men collected these verses and remembered them from generation to generation until the emotional side of their character faded away under the shocks of national life. We have said that the distribution of verses in the Rig Veda bears a mark of the growth of system; and we say that the collection of miscellaneous verses in the first and the tenth Mandala is corroborative of this remark. The people now took care to ascertain exactly what songs belong to a particular family; they now perform the task of a historian. The Rig Veda is a record of the past and not a book of song.

Then follow two others the Yajur and the Atharvan, which we need not discuss for our present purpose, except to say only that the Yajur was collected with a special purpose—the performance of religious rites.

Next we come to the second part of Vedic literature, the Brahmanas. The character of the Brahmanas has been thus defined by the learned Professor Weber. "Their object is to connect the sacrificial songs and formulas with the sacrificial rite, by pointing out on the one hand their direct mutual relation; and on the other, their symbolical connexion with each other. In setting forth the former, they give the particular ritual in its details; in illustrating the latter they are either directly explanatory and analytic, dividing each formula into its constituent parts, or else they establish that connection by the aid of tradition or speculation. We find in them the oldest rituals we have, the oldest linguistic explanations the oldest traditional narratives and the oldest philosophical speculations. This peculiar character is common generally to all works of this class yet they differ widely in details according to their individual tendency and according as they belong to this or that particular Veda. The Brahmanas seem to have originated from the opinions of individual sages imported by oral tradition and preserved as well as supplemented in their families and by their disciples. The more numerous these separate traditions became, the more urgent became the necessity for bringing them into harmony with each other. To this end as time went on compilations comprising a variety of these materials, and in which the different opinions on each subject were uniformly traced to their original representatives were made in different districts by individuals peculiarly qualified for the task.

It was but natural that these compilers should frequently come into collision and conflict with each other. The preponderate influence gradually gained by some of these works over the rest has therefore resulted in the preservation of these only ; while works representative of the disputed opinions have for the most part disappeared. Thus we find that works which had come to be considered of the highest authority have been preserved although the practical significance of the Brahmanas were gradually more and more lost and passed over to the Sūtras which form the third stage in Vedic literature.

These Sūtras are upon the whole, essentially founded on the Brahmanas, and may be considered as their supplement, "as a further advance in the direction of a more rigid system of formalism." The Brahmanas explain individual instances of rituals, the object of the Sūtras is to explain everything that has any reference to these subjects. Here is a concise summary of the points discussed in Brahmanas and the utmost brevity is observed. Thus we come to the Śrauta Sūtras and the Grihya Sūtras the latter treating of domestic ceremonies celebrated at births deaths and marriages as well as after death. In these Grihya Sūtras we find an attempt to preserve in memory the forms and traditions of the past, while in the former we see only an attempt to collect the opinions of learned sages and to discuss them with reference to the particular customs of different sects and tribes. The above history shows the gradual failing of memory and an attempt to preserve the relics of old. There were frequent attempts to settle disputes as to rituals and their forms amongst different tribes and people and attempts to reconcile the various traditions of old which each tribe held in esteem and veneration, It was found that words and phrases which had become unmeaning could be explained only with reference to traditions and these causes we believe led to the composition of both the Brahmanas and the Sūtras. They try to preserve intact old forms and old legends and discuss the meanings of old songs and try to fix a definite meaning to it. We believe the composition of these very Sūtras is indicative of a failing memory and dying language.

Take up any of the Brahmanas and you will find a clear indication that there was a language of the past which was fast fading from the memory of the people. This fact was recognized long ago even we may say at the time when the Vedic language had not

completely passed away. Says the commentary on the Taittiriya Samhita.

যত্ৰপি মত্ৰ ব্ৰাহ্মণাংকো বেদ তথাপি ব্ৰাহ্মণমত্ৰ ব্যাখ্যানরূপতাদ্ মত্ৰাএব আদৌ
নমাত্তাভাঃ ।

Although the Veda consists of Mantras and Brahmanas yet as the Brahmanas have the character of explanations of the mantras (it follows that) the latter were the first recorded.

The Brahmanas were thus from a very early stage in the history of Sanskrit literature considered to be explanatory of the Mantras. Open a page of the Brahmana and you read *ছন্দাং সি বৈ প্রযাজাঃ*—*অনুযাজাঃ* and again *ঋতবো বৈ প্রযাজাঃ*—*ঋতবোহনুযাজাঃ* about the meaning and the significance of the prayajas and the anuyajas (the beginning and the end of all religious ceremonies); some Brahman says that these are the seasons some others say they are the metres: and thus different Brahmanas explain the terms in different ways. The Brahmanas explain terms like Vritra, Tvashtara, and so on and they also contain legends and episodes which serve to explain the mantras, or were at the time of composition of these Brahmanas supposed to be connected with any mantras; for instance, the stories relating to Vasishtha, (1) Indra (2) Brihaspati (3) Chhandas (4). Take one of the Srauta works you find the same tendency in them to fix the meanings of words and phrases mostly however in reference to the liturgy. But there they are,—the landmarks of honest endeavours by religious persons to explain their religious rites which had descended to them from memory to memory which had gradually failed.

With the Sutra period, the authority of the Vedas declines. The Vedas consist of two portions, it has been said, the Mantras and the Brahmanas. There is no third portion. On referring to Kumarila's Tantra Varttik we find a clear indication of how the Sutras were held in much less esteem than the collections of mantras and those works described above and known as the Brahmanas. Srauta Sutras are not Srutis themselves, but are based on revelation. The mantras were seen, they were a revelation to certain selected people. The Brahmanas alike which explain how these mantras are to be used in certain religious rites and performances

(1) Vide Tandymahabrahmana Asiatic Society's Edition pages 217 and 264.

2) pp. 219, 267, 268, 394, 397, 399, 411, 436, 478, 479 etc.

and these directions also have been held to form a revelation. But the Srauta Sutras it is argued* could not have been* revelation as they imply an author who composed them such as Masaka and others and although these Sutras treat of the same subjects as the Śruti they are themselves extracts only from the sacred writings. These works do not take their names, like the Kathaka and other Sakhas of the Vedas from those by whom they were proclaimed, but from their real authors. Says Kumarila as follows:—

যথা চ কঠাদিচরণৈরনাদিভিঃ প্রোচ্যমানানামনাদি বেদ শাখানা মনাদিসমাখ্যা
সংভবো নৈব নিত্যাবস্থিতমশকাদি গোত্রচরণ প্রবচন নিমিত্ত সমাখ্যাপপত্তিঃ । মশ-
কবোধায়নাপস্তম্বাদিশকা হুদিমেদেক জব্যো পদেশিন ইতি ন তেভ্যঃ প্রকৃতিভূতেভ্যো-
হনাদি গ্রন্থ বিষয় সমাখ্যা ব্যুৎপাদনসংভবঃ ॥

“The branches of the Veda which were proclaimed by the sects of Katha and others from all eternity, have a fair claim to be called eternal. But this does not apply to works handed down by the sects or families of Masaka and others, however long they may have been established. For names like Masaka, Baudhayana, and Apastamba imply an individual being which had a beginning and therefore it is impossible that a title derived from these names should ever belong to an eternal work ” And again

“যথৈব হি কল্পসূত্র গ্রন্থানিতরাংগস্থতিনিবন্ধনানি চাখ্যোক্তখ্যাপয়িতারঃ স্বরন্তি তথা
খলায়নবোধায়নাপস্তম্ব কাত্যায়ন প্রভৃতীন্ গ্রন্থকারত্বেন ”

For teachers and pupils do not only know by heart the Kalpa Sutra books, and the other Vedanga and Smriti compositions, but they also remember Aswalayana Baudhayana Apastamba Katyayana and others as the authors of these books.

Thus we see that the reverence which attached to the collections of Mantras and Brahmanas failed in the case of the Srauta works. There was evidence of a composition and a compilation and the forefathers had known the writers thereof. Works which were composed by men could not have the same authority* as the Vedas had and so they sat arguing within themselves whether they should acknowledge their authority. The Hindu Society at that date was so far independent of the so called Brahmanic influence as to be able to entirely disregard such authority and the result of their internal questionings appear in the famous work so full of important historical facts but so little known to the lay populace namely

the Tantra Vartika of Kumarila. Whenever the Srauta Sutras appear to be in contradiction with the Sruti, their authority is at once overruled, and only in cases where anterior evidence is wanting from the Sruti, can they have any claim to independent authority. Amongst the Srauta Sutras, the Kalpa Sutras are the chief and about them Kumarila in his Tantra Varttika says as follows :—

এবং কল্পসূত্রেষ্বৰ্ণবাদাদি মিশ্রশাখাস্তর বিপ্রকীর্ণনায় লভ্যবিধাপসংহার কল্পমর্থ
নিরূপণং তত্ত্বংপ্রমাণমঙ্গীকৃত্য কৃতং । লোকব্যবহার পূৰ্ব্বকাস্ত কেচিদ্ভিগাদি ব্যব-
হারাঃ সুখার্থ হেতুভবেনাপ্রিতাঃ ॥

“Thus the real sense has been ascertained in the Sutras by means of collecting the commandments which were to be obtained systematically as they were dispersed in different Sakhas and mixed up with Arthavadas &c. One or other authority was selected, and to afford greater facility some performance of priests which are connected with worldly matters were also taken in.

Kumarila evidently perceived in the Kalpa Sutras a growth of Scientific method, and observed in them a more practical system, and if we interpret Sayana correctly, we find him supporting the doctrine which the learned Kumarila held in respect of the Kalpa Sutras. Says Sayana in his Commentary on the Baudhayana Sutras :—

তত্র তাবদ্বিধ্যার্থ বাদমস্ত্রাস্থানা ত্রিধা ব্যবস্থিতো বেদরাশিঃ । বিধিবিহিতমর্থবাদ
প্রয়োচিতং মস্ত্রেণ স্বতমভ্যাদয়কারি ভবতীতি । ততশ্চ চোদিতানাং কৰ্মণাং সুখাব-
বোধায় ভগবান্ বোধায়নঃ কল্পমকল্পয়ৎ । যতো ব্রাহ্মণানামনন্ত্যং ছরববোধতয়া * *
* ততো ন তৈঃ সুখং কৰ্মাববোধ ইতি কল্পসূত্রানীমানি প্রতিনয়ত শাখাস্তরানঙ্গীচকুঃ
পূৰ্বচাৰ্ঘাঃ ॥ কল্পস্ত বৈশদ্যলাঘবকাৰ্য্য প্রকরণ শুদ্ধাদিভিঃ প্রকৰ্ষৈযুক্তম্ which
in short means that in order to make the understanding of the prescribed ceremonies more easy the Reverend Baudhayana composed the Kalpa. For the Brahmanas are endless, and difficult to understand, and therefore have old masters adopted the Kalpa Sutras according to the different Sakhas. These Kalpa Sutras have the advantage of being short, clear, complete and correct.

In contradistinction to the Srauta Sutras, there are two other classes of Sutras which belong to the same branch of literature with the Srauta Sutras viz. the Grihya Sutras and the Samayacharika Sutras both of which are included under the common

name of Smarta Sutras. The Grihya Sutras deal in general with the rites and ceremonies to be performed with relation to the sacrificial fire in the events of domestic life. গৃহশব্দেণ স্মার্ত্যগ্নিকৃত্যতে । তস্মিন্ যানি কৰ্ম্মাণি তানি গৃহাকৰ্ম্মাণি । অথবা গৃহাস্থিতিঃ । তস্তাং যানি তস্তাং যানি কৰ্ম্মাণি । অথবা গৃহাপত্তী । তথা সহিতস্ত যানি কৰ্ম্মাণি ॥

By the word Grihya, the Smarta fire is meant ; all works which have to be done in relation to this fire are Grihya works : Or by this word is meant Smṛiti ; and all works dictated thereby are Grihya works. Or is meant wife, and whatever is done with her is Grihya work.

There evidently were certain acts invariably referred to as Grihya works but about the principle of classification and arrangement of these acts in a scientific and scholarlike way, there seems to have been a certain discrepancy of opinion amongst the sages of this time. The Grihya ceremonies are performed by the married house-holder for the benefit of his family and the Samayacharika rules are to be observed by the rising generation, and regulate the various relations of every day life

We next turn our attention to the six Vedangas which have been classified by European scholars with the Sutra works, Sikhya Kalpa Vyakarana Nirukta, Chhanda and Jyotisha. First as to the works called by the name of Sikha.

শিক্ষ্যন্তে বেদনারোপদিষ্টান্তে স্বরবর্ণাদিরো যত্রাসৌ শিক্ষা । সৈব শীক্ষা ॥

That science which teaches the correct use of long and short vowels is the Sikha, and it forms part of the Vedas in this way that a correct knowledge of the vowels is requisite for bringing out a perfect result of a mantra, as says Kumarila.

তত্র শিক্ষাণাং ভাবদ্বয়ধ্বনিকরণস্বরকালাদি প্রবিভাগকথনং তৎপ্রত্যক্ষপূৰ্ব্বকং ।
যত্ন তথা বিজ্ঞানাংপ্রয়োগে ফলবিশেষ স্বরণং যন্তোহীনঃ স্বরতো বর্ণতো . তি চ
প্রত্যবায় স্থতিস্তদ্বাদমূলম্ ।

Next is the Kalpas about which we have spoken above, and as to the authority of which we have already quoted Kumarila. The third is the Vyakarana, about which Kumarila says as follows :—

ব্যাকরণেহপি শব্দাংশক বিভাগজ্ঞানং শাখাবৃদ্ধাদি বিভাগবৎ প্রত্যক্ষনিমিত্তং ।
সামুদায়িকপ্রয়োগাৎ ফলসিদ্ধিঃ অপশব্দেন তু ফলবৈজ্ঞান্যং ভবতীতি বৈদিকং ॥

Grammar teaches the correct use of words and their vulgar

uses also. By the use of proper words the object of desire is attained but by the use of improper words the contrary result is obtained. This science is also based on the Vedas. Next comes the Nirukta, the most important for our present purpose and which will be fully described hereafter. We may say in passim introducing this work that it consists of five parts.

বর্ণাগমো বর্ণবিপর্যয়শ্চ হৌ চাপরৌ বর্ণবিকারনাশৌ ।

ধাতোত্তরার্থাতিশয়েন যোগস্তদুচ্যতে পঞ্চবিধং নিরুক্তম্ ॥

A Nirukta contains the doctrine of five things ; of the addition transposition, change, and dropping of letters, and of the use of one particular meaning of a root.

How works like these became necessary will appear from Yaska's own words as follows :—

অথাপীদমন্তরেণ মজ্জৈবৰ্থ প্রত্যয়ো ন বিদ্যতে । অর্থমপ্রতীয়তো নাত্যন্তং স্বর-
সংস্কারোদেগঃ । তদ্বিধং বিদ্যাভ্যাসঃ ব্যাকরণশাস্ত্রকান্নাং স্বার্থসাধকং চ ॥

It has been translated as follows :—

“Now without this work the meaning of the hymns cannot be understood ; but he who does not comprehend their meaning cannot thoroughly know their accentuation and grammatical forms. Therefore this department of science is the complement of grammar, and an instrument for giving one's object.” And Sayana says in his Introduction to his commentary on the Rig Veda তস্মাদ্ বেদার্থাববোধায় উপযুক্তং নিরুক্তং “Hence the Nirukta is serviceable for the understanding of the meaning of the Veda.” And we may also note here that the helps to this interpretation adopted by Yaska himself were the opinions of previous Niruktas or founders of the Vedas and sacred tradition and reasoning.

ময়ং মন্ত্রার্থচিন্তাভূয়ো অভূড়োহপি প্রতিবেদিতকৃতঃ । ন তু পৃথক্বেন মন্ত্রাঃ
নিবর্তব্যাস্তাঃ প্রকরণম্ এব নিবর্তব্যাস্তাঃ ।

“This reflective deduction of the sense of the hymns is effected by the help of sacred tradition and reasoning. The texts are not to be interpreted as isolated, but according to their context,” We add an illustration here to show how Yaska tried to attain his object. Let us take a Rik.

চত্বারি বাব্ পরিমিতা পদানি তানি বিহুৰ্ভাঙ্গণা বে মনীষিণঃ ।

ঔহাভীশি নিহিতা নেদয়ন্তি তুরীয়াং যাচো মনুষ্যা বদন্তি ॥

The language of this is easy to understand but it is not so easy to

explain what the ancient writers meant by this verse. The meaning of the words is that there are four measured grades of language with which intelligent Brahmanas are acquainted. Three hidden in secret, indicate nothing. The fourth grade of speech is uttered by men. But it is hard to ascertain what the learned Rishi meant by the four kinds of speech of which three indicate nothing and the fourth is uttered by men. Yaska some centuries ago felt the same difficulty as we are feeling now and now let us see how he tried to get at the real meaning of the phrase চত্বারিবাঙ্ পুরিত্তা পদানি we read in the supplement to the Nirukta 1-9.—

কতমানি ভানি চত্বারি পদানি ওকারোব্যাহতয়ন্ত ইতি আৰ্যঃ নামাখ্যাতে চ উপসর্গ
নিপাতান্ত ইতি বৈয়াকরণাঃ মন্তঃ কল্পো ব্রাহ্মণং চতুর্থী ব্যবহারিকী ইতি যাজ্ঞিকাঃ
অচো যজুঃসি সামানি চতুর্থী ব্যবহারিকী ইতি নৈরুক্তাঃ সর্পাণাং বাগ্‌বয়সাং ক্ষুদ্রস্ত
সরীসৃপস্ত চতুর্থী ব্যবহারিকী ইত্যেক পশুষু ভূগবেষু মৃগেষু আত্মনি চ ইতি আত্মপ্রবানাঃ
অথাপি ব্রাহ্মণং ভবতি সার্বৈ বাক্‌স্মৃষ্টা চতুর্থী ব্যভবদেবেষু লোকেষু ত্রীণি পশুবুতুরীয়াং যা
পৃথিব্যাং সা অগ্নৌ সা অরণ্যন্তরে বা অন্তরিক্ষে সা বায়ৌ সা বায়ুদেবেষু বা দিবি সা আধিত্যে
সা বৃহতী সা স্তনরিত্তাবধ পশুষু ততো বা বাগ্‌তিরিত্যে তাং ব্রাহ্মণেষদধুঃ তস্মাৎ ব্রাহ্মণাঃ
উত্তরীং বাচং বিদন্ত যা চ দেবানাং বা চ মনুষ্যাণামিতি which may be translated
as follows :—What are these four Vedas ? The explanation of the
Rishis is that they are the four mystic words Om Bhuh Bhuvah and
Svar. The Grammarians say they are the four kinds of words,
nouns, verbs, prepositions and particles. The ceremonialists de-
clare them to be the Mantras, the Kalpas, the Brahmanas and
the current language. The commentators explain them as being
the Rig, the Yajush, the Saman, texts and the current language.
Others think they denote the speech of serpents, of birds, of small
reptiles and the current language. The philosophical school ex-
plains them as having reference to cattle, musical instruments,
wild animals and soul. On this point we have also the following
text in a Brahmana : speech when created 'became divided into
four parts of which, three abide in these three worlds :—Earth, the
atmosphere, and the sky and the fourth among the beasts.
Terrestrial speech abides in fire and in the Rathantara texts.
Atmospheric speech abides in the wind, and in the Bama Devya
prayers. Celestial speech abides in the sun, in the Brihata metre.
The fourth portion of the speech was in the beasts. The speech

which was most excellent was placed in the Brahmanas. Hence the Brahmanas speak two sorts of language, both that of Gods and that of men.

Here we note how Yaska availed himself of the materials in hand. If however the result of his researches is to be the test of the correctness of his mode of investigation, we cannot of course admit that the result which he arrived at were such as will satisfy us in the present day; but all the same this method is of very great value to our present enquiry. He collects in the commentary the opinions of different classes or sects of learned people and then notes the Brahmana about it and then if possible argues and settles the proper meaning of the words and phrases under discussion. We may note further that even the Nirukta (Yaska's) is held in very great esteem by the Hindoos and that the comments made by this learned Pandit seem to be invulnerable to a Hindoo of the old style. But whether we ought to accept this learned Pandit as infallible will be discussed in a later portion of this disquisition.

The next Science to which our attention is drawn is that of astronomy. This Science was important to ritualists as it serves to fix the dates when particular ceremonies have to be performed.

জ্যোতিঃশাস্ত্রেহপি যুগপরিবর্তন পরিমাণদ্বারেণ চন্দ্রাদিত্যাদিগতিবিভাগজ্ঞানেন তিথি নক্ষত্রজ্ঞানমবিচ্ছিন্ন সম্প্রদায় গণিতানুমানমূলং গ্রহসৌহৃদ্য নিমিত্ত পূৰ্ব্বকৃত শুভাশুভ কৰ্ম্মফলবিপাকসূচনস্ত তদুপশাস্ত্যাং বিধানদ্বারেণ বেদমূলং ॥ এতেন সামুদ্রিক-বিদ্যাং বিদ্যাং বিদ্যাং জৈদৃশ বা বিদ্যঃ সৰ্ব্বজ্ঞানমাতব্যঃ । জৈদৃশে গৃহশরীরাং সন্নিবেশে সত্যোত্তমোত্তম প্রতিপত্তব্যমিতি ॥

The Science of Jyotisha teaches the change of times and the measure thereof and gives us the knowledge of the course of the sun or the moon and the divisions of their course and cycle. And by the good or bad temper of the stars in ascendant we know when the results of past good and bad actions will have to be suffered or enjoyed. The Vedas lay down how the stars have to be appeased hence this Shastra is said to be based on the Vedas. This includes Samudrika and the Bastuvidya. Thus we find that at the time when Kumarila lived, the Science of astrology was included amongst the Sranta works. Next we have to refer to the Chhandas or the Science of metres. This doctrine teaches us the proper use and reading of the different metres used in the mantras.

ছন্দোবিচিত্ৰ্যমপি গায়ত্ৰ্যাদি বিবেকো লোকবেদয়োঃ পূৰ্ব্বেদেব প্রত্যক্ষঃ ।
তৎজ্ঞানপূৰ্ব্বক প্রয়োগাত্ম কলমিতি জ্যোতঃ । তথাচানিষ্টং ক্রমতে যোহ বা বিদিতাৰ্ধে
ছন্দোদৈবতব্রাহ্মণেন মন্ত্ৰেণ যজতি যাজয়তি বা ইতি ।

The doctrine of Chhandas teaches the use of the different metres ; this can be proved by direct evidence ; and it is also well-known from the Vedas that the object of desire is gained by a knowledge of their proper use. Therefore it has been declared by the Shastras that a man who performs or gets any ceremony performed without a knowledge of the Rishi, Chhandas, Devata and Brahman, does not reap the benefit of it.

Next in importance with reference to our present subject is the Smritis,—Manu and the rest whose authority was first questioned but afterwards confirmed in spite of the attacks of the Buddhists. We all know the famous saying,—whatever Manu says is medicine which shows in what great respect the Shastras compiled by Manu and the rest were held. There was once a time when people used to discuss the origin and the authority of the Smritis. They tried to ascertain with accuracy the authority with which these works should be endowed and they began to examine whether they could place absolute faith in these works. It was urged that these were collections from lost portions of the Vedas, and the Buddhists took advantage of this theory and it was discussed and analysed by Kumarila Bhatta in his said learned work the Tantra Vartika, where the whole course of discussions was reviewed and whereby it was decided that those works which were based on the Vedas were to be deemed as of authority and others which were not of such a nature as the above were not to be taken as authority.

As to the authority of these works we have texts to show that these works although held in much esteem as being based on the Vedas, yet they were never considered as part of the Vedas themselves. Says the Nyaymala Vistara as follows :—

বোধায়নাপত্তম্বাখ্যায়ন. কাত্যায়নাদি নামাঙ্কিতাঃ কল্পিত্ৰাদিগ্রন্থাঃ নিগমনিরুক্ত-
বড়গ্রন্থাঃ মবাদিশ্চ তস্মৈ অপৌকবেদ্যাঃ । ধৰ্ম্মবুদ্ধিজনকত্বাৎ ন বৎ । ন চ মূলপ্রমাণ
সাপেক্ষত্বেন দেববৈবৰ্ম্যমিতি শঙ্কনিরম্ । উপমাত্রাঃ বুদ্ধেঃ স্বতঃ প্রামাণ্যাদীকারণ
নিরপেক্ষত্বাৎ । মৈবং । উক্তানুমানস্য কালাত্যয়াপত্তিভ্যং বোধায়নহৃতমাপত্তম্ব
হৃতমিভ্যেবং পুৰুষনারা তে গ্রন্থা উচ্যন্তে ন চ কাঠকাদি সমাখ্যাবৎ প্রবচন নিমিত্তত্ব
বৃত্তং । তদ্বৎ নিৰ্মাণকালে তদানীন্তনৈঃ কৈশিহপলকৃত্যন্তচ্চ অবিচ্ছিন্ন পারম্পর্যেণ

অনুবর্ততে ততঃ কালিদাসাদি গ্রন্থং পৌরবেদ্যাঃ তথাপি বেদমূলত্বাৎ প্রশংসাম্ । মৈবং ।
কল্পত বেদত্বং ন অদ্যাপি সিদ্ধং কিন্তু প্রযত্নেন সাধনীয়ম্ ন চ তৎ সাধয়িতুং শক্যং
পৌরবেদবদস্য সমাখ্যাতা তৎকর্তৃ রূপলভেন চ সাধিতত্বাৎ ।

Some persons have asserted that the Kalpa Sutras and other works designated by the names of Baudhayana, Apastamba, Aswalayana, Katyayana etc. and the Nigama, Nirukta, and six Vedangas, together with the Smritis of Manu and others, are superhuman, because they impart to men a comprehension of duty like the Vedas ; and that they are not to be suspected of dissimilarity to the Vedas, from the fact of their appealing to the authority of the original text ; for the knowledge of duty which they impart is independent, because it is admitted to be self-evidencing. But this view is incorrect ; for the inference in question proceeds upon an erroneous generalization. These works are called by the names of men ; as the Sutras of Baudhayana, the Sutras of Apastamba etc., and these designations cannot properly be derived from the fact that these works were studied by those whose names they bear as is actually the case in regard to the Kathaka and other parts of the Veda ; for it was known to some of their contemporaries at the time of the composition of these Sutras and the Smritis, etc., that they were then being composed ; and this knowledge has come down by unbroken tradition. Hence, like the works of Kalidasa and others, the books in question are of human origin. Nevertheless, from being founded on the Veda, they are authoritative. And again "It is not yet proved that the Kalpa Sutras are part of the Veda and it would require great labour to prove it and in fact it is impossible to prove it. For the human origin of this book is established by its name, and by its being observed to have had an author."

It is clear from all the authorities cited above and the evidence of independent people that except the Mantras and Brahmanas all works had a human origin but they came to be respected and their opinions were gradually submitted to and accepted as true in course of time when it was found that following their dictates and principles was beneficial or that these were based on the Vedas. The Hindoos do not seem at this period to have been broken down by prejudices ; they seem to have had strength enough to argue whether they would accept certain works as authoritative and

here we find them starting a discussion at the end of which it is decided practically that such works are to be followed as are actually based on the Vedas or if they are consonant with reason and productive of good to the followers. Next we come to the Puranas, which though of a later date yet including as they do within their compass a record of all legends and stories and a collection of genealogies, they are of more value to us at the present day than have probably been ascribed to them. What is a Purana ?

সর্গশ্চ প্রতিসর্গশ্চ বংশোন্ময়স্তরাণি চ ।

বংশানুচরিতকৈব পুরাণং পঞ্চলক্ষণম্ ॥

A Purana should contain five things creation subcreation Dynasties Epochs and the character of different dynasties.

The Puranas are many in number and it is hard to ascertain which of them are genuine and which are not. In the course of time, certain Puranas have got the pre-eminence and some others have been wiped away from the memory of man and we can quite conjecture that the true reason for survivorship is conformity with Vedic ideas.

As to the authority of the Puranas or of certain portions of them, we have again to refer to the same valuable work where the author distinguishes and lays down a principle for distinguishing the portions of these works which may be considered to be authoritative and binding being based on the Srutis, from those portions which ought to be considered as having far less authority than the former, in as much as they could not be traced to any Vedic origin; but the palpable reason for their being endowed with authority being that they were partly records of old things which old people who were still living could have verified as having occurred within their memories and partly again as they were episodes teaching the practice of noble qualities. Thus for instance the great professor says সর্গপ্রলয়োপবর্জনমপি দৈবপুরুষ কার প্রজাবপ্রবিভাগ প্রদর্শনার্থং সর্গজ হি তৎকালে তৎপ্রবর্ত্ততে তদুপরমে চোপরমতীতি । The story of the creation and destruction are given only as an illustration of effects of action and inaction. Action is creative but inaction is destructive.

Besides these works there are the commentators who came after the Nairuktas, who tried to explain the Vedas according to

their own ideas, and of whom Sayana is the best known to us. This we may call the fifth stage of interpretation of the mantras. In these commentaries we find how all the works named above were by them taken to aid them in their discourses, and we find that already at that time there were various classes of interpretations and how that all these different classes put different meanings on the same words and how that these commentators endeavoured to reconcile them.'

With the review of the Puranas ends our discourse as to what materials we have in hand such as might be utilised in our search as to the true interpretation of the Vedas. We have walked from the earliest dawn of time up to the humdrum life today. We have seen at the dawn the people in their freshness and exuberance of youth talking and thinking in a language which we style the Vedic. We have seen that in the noonday brilliance of active social life this language was gradually being forgotten, the old race of people died and the younger generation by influence both external and internal gradually gave up old and effete thoughts ideas idioms and grammar and formed new things with which they could Live. Life is the essence of this story as of all other stories and histories. People like individuals grow Live and die. When the false love for dead forms grew strong on them, then did death take hold of the Hindus; their language, their literature, science and society became as it were an inert mass of lifeless stone and its existence became unmeaning like the old coach in the centre of the road blocking up all thoroughfare.* This coach must be removed, the principle of life action, preached by the Puranas comes with its mighty club and does away with effete kingdoms which worshipped dead things. The Hindus from time to time did adapt themselves to their surroundings and succeeded as witness the works themselves which we have described above, but the old language was gradually forgotten and attempts were made from time to time to fix the true meanings of words and phrases which gradually fell out of use, and thus sprang as we believe the six doctrines and the Smritis and Puranas. All these we have to study and search in order to find out the meanings of those old forms, things which at this age of the Renaissance we like to enliven and

* See Carlyle's French Revolution.

bring into use so that the wisdom of the ancients can operate upon the active principle of the life of today. We regret now that we have lost a glorious past,—a past the glory of which was not known to us about a hundred years ago but which has been declared with vivid enthusiasm by all foreign scholars trying to pry into the secrets of Eastern antiquity and it is apparent now that we must read the past as if from the palms of our hands! and if we can read the past with a certain degree of accuracy we can hope that we shall be able to read our future too. In our re-birth, our palms mark our actions of the past and we read them there by analysis and comparison. We have now to take stock and try with the stock in hand to make up for our lost fortunes. If the stuff we have in stock is rotten, let us admit it and put it down for a proper price. Let us not overestimate our faculties, let us ascertain the marketable value of the goods in store and then we hope we shall be able to start a new shop. Thanks to the goodness of heaven! The researches of orientalists and antiquarians have added to our store new facts and have discovered new things. Besides the internal assistance we have mentioned above we have now the addition of the other resources,—one, the researches into other Asiatic antiquities and secondly the researches into the antiquities of the Hindus themselves by Western Scholars. When we have these three we shall have probably all the keys with which to unravel deep mysteries in the history of Hinduism. We have seen in a short compass how the ancients tried to re-invigorate themselves; we shall now search how we can do so in our own time.

BRAJA LAL MUKHERJEE.

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IX.

AGNI.

মধুচ্ছন্দা বৈশ্বামিত্রঃ । অগ্নিঃ । গায়ত্রী ।
অগ্নিমীলে পুরোহিতং যজ্ঞস্ত দেবমৃদ্ধিজং ।
হোতারং রত্নধাতমং ॥১
অগ্নিঃ পূর্বেভিঃ বিভিন্নীভ্যো নূতনৈরুত ।
স দেবা এহ বক্ষতি ॥২
অগ্নিনারয়িমন্মবংপোষমেব দিবেদেবৈ ।
বর্শসং বীরবন্তমং ॥৩
অগ্নে যং যজ্ঞমধ্বরং বিশ্বতঃ পরিভূরসি ।
স ইন্দ্রেবেষু গচ্ছতি ॥৪
অগ্নির্হোতা কবিক্রতুঃ সত্যশ্চিত্তশ্রবন্তমঃ ।
দেবো দেবেভিরা গমং ॥৫
যদংগ দাপ্তবে ত্বমগ্নে ভদ্রং করিষ্যসি ।
তবেত্তং সত্যমংগিরঃ ॥৬
উপত্বাগ্নে দিবে দিবে দোষাবস্তুর্ধিরা বহ্নঃ ।
নমো ভরন্ত এমসি ॥৭
রাজতমধ্বরাণাং গোপামৃতস্ত দীদিবিং ।
বর্ধমানং শ্বে দমে ॥৮
স নঃ পিতব স্থনবেহগ্নে স্থপায়নো ভব ।
সচস্বা নঃ স্বস্তয়ে ॥৯

AGNI.

I. 1. *Rishi Madhucchanda, Son of Bishvamitra.*

I praise the god Agni, the priest of the family, the Ritvik of the sacrifice, the Hota and the greatest holder of wealth—1.

Agni was worthy to be praised by the ancient rishes. He is worthy to be praised by the present rishis also. He brings the gods here—2.

Through Agni the worshipper obtains wealth that increases from day to day and consists of fame and heroes—3.

Agni, the sacrifice and worship you encompass that alone goes to the gods—4.

Agni is Hota, the skilful poet. He is true and most renowned. May the god come with the gods—5.

O Agni, the good that you do to the offerer of libations, that, O Angira, is truly yours—6.

To you, Agni, we come day by day, day and night with salutation proceeding from our heart—7.

You are king of sacrifices, the protector of sacred rites and resplendent. You increase in your own abode—8.

Be you, Agni, easily accessible to us as the father is to the son. 9.

গুৎসমদ আংগিরসঃ । অগ্নিঃ । জগতী ।

ত্বমগ্নে দ্রাভিষ্মাণ্ডগুৎসমদানস্পরি ।

ত্বং বনেভ্যামোষধীভ্যাম্ নৃণাং নৃপতে জায়সে শুচিঃ ॥১

তবান্ধে হোত্রং তব পোত্রমুদ্বিগ্নং তব নেত্রং ত্বমগ্নিদুতায়তঃ ।

তব শ্রশান্তং ত্বমধ্বরীয়সি ব্রহ্মা চাসি গৃহপতিশ্চ নোদমে ॥২

ত্বমগ্ন ইংদ্রো বৃষভঃ সতামসি ত্বং বিষ্ণুরুকগায়ো নমস্তঃ ।

ত্বং ব্রহ্মা রয়িবিদ্ ব্রহ্মণস্পতে ত্বং বিধর্তঃ সচসে পুরংধ্যা ॥৩

ত্বমগ্নে রাজা বরুণো ধৃতব্রতশ্চ মিত্রোভবসি দম্ন ঈভ্যঃ ।

ত্বমগ্নমা সৎপতির্যশ্চ সংভূজং ত্বমংশোবিদধে দেব তাক্ষয়ুঃ ॥৪

ত্বমগ্নে তৃষ্টাবিধতে সূবীৰ্যং তব গ্রাবো মিত্রমহঃ সজাতাং ।

ত্বমাশুহেমা ররিষে শ্রব্যাং ত্বং নরাং শর্ধে অসি পুরুবহুঃ ॥৫

ত্বমগ্নে কদ্রো অসুরো মহো দিবশ্চ শর্ধে মাকুতং পৃক ঈশিষে ।

ত্বং বাতৈররুণৈর্ঘাসি শংগয়শ্চ পূষাবিধতঃ পাসিহুস্বনা ॥৬

ত্বমগ্নে ত্রিবিণোদা অরংকৃত্তে ত্বং দেবঃ সবিতা রত্নধা অসি ।

ত্বং ভগ্নো নৃপতে বহু ঈশিষে ত্বং পায়ুর্দমে যন্তেহবিধং ॥৭

ত্বমগ্নে দম আ বিশ্ণুপতিঃ বিশশ্চাং রাজানং সূবিদ্রমুজতে ।

ত্বং বিজ্ঞানি যনৌক পত্যসে ত্বং সহস্রাণি শতা দশ প্রতি ॥৮

স্বাম্যে পিতরমিষ্টিভির্গর্যাং ভ্রাতার শম্য তনুচৎ ।
 স্বং পুত্রো ভবসি যন্তেহবিধস্বং সখা স্মশেবঃ পাতৌধসঃ ॥১০
 স্বময় ঋতুরাকৈ নমস্ত স্বং বাজস্ত কুমতো রার ঈশিবে ।
 স্বং বিভাস্তমুদকি দাবনে স্বং বিশিকুরসি যজ্ঞমাতনিঃ ॥১০
 স্বম্যে অদিতিদেব দাপ্তবে স্বং হোত্ৰাতারতী বধসে গিরা ।
 হমিলা শতহিমাসি নক্ষসে স্বং বৃহহা বসুপুতে সরস্বতী ॥১১
 স্বম্যে সূতৃত উত্তমং বরস্তব স্পাহে বর্ণ আ সন্দৃশি ত্রিয়ঃ ।
 স্বং বাজঃ প্রতরণো বৃহন্নসি স্বং ররিবহলো বিশ্বতস্পৃথুঃ ॥১২
 স্বাময় আদিত্যাস আশ্তং স্বাং জিহ্বাং শুচয়চ্চক্রিরে কবে ।
 স্বাং ধাতিষাচো অধ্বরেষু সচ্চিরে স্বে দেবা হবিরদংত্যাহতং ॥১৩
 স্বে অগ্নে বিধে অমৃতাসো অঙ্গহ আসা দেবা হবিরদংত্যাহতং ।
 স্বরা মর্ত্যসঃ স্বদংত আমৃতিং স্বং গর্ভোবীৰুধ্যং অজিষে শুচিঃ ॥১৪
 স্বং তাস্ত্ৰং চ প্রতি চাসি মজুনাগ্নে সূজাত প্রচ দেব রিচ্যসে ।
 পৃক্ষে যদত্র মহিনা বি তে ভুবদহু ত্বা বা পৃথিবী রোদসী উভে ॥১৫
 যে স্তোতৃত্যো গোঅগ্রীমশ্বপেশশম্যে রাতিমুপস্থজংতি হরয়ঃ ।
 অশ্বাঞ্চ তাংচ প্রহি নেষি বস্ত আবৃহদদেম বিদথে স্ববীরাঃ ॥১৬

AGNI.

II—1.

Agni, you are born of the skies ; you are born resplendent ; you are born of waters ; of stones.

O lord of men, you are born of forests and of herbs ; you are born bright, 1.

The office of the Hota, O Agni, is yours ; yours the office of Pota, of the Ritvik and of the Nesta—You are the Agnidhra of him who observes the laws.

The office of the Prosastra is yours. You are the Adharyu and Brahma. In our house, you are the lord of the house, 2.

You are the manly Indra of the pious man. You are the adorable Vishnu, the mighty stepper.

You are the wealth-knowing Brahna, O Brahmanapati—you protect us by your wisdom, O Sustainer 3.

Agni, you are King Varuna the upholder of laws. You are the handsome adorable Mitra.

You are Aryama the lord of the pious from whom we get all

our enjoyments. In the sacrifice, o god, you are the bounteous Angsha—4.

O Agni ! you are Tastva—you give brave sons to your worshipper. The heavenly females are all yours. Being rich in friends you give us relations. Being quick-giver you give us noble steeds. Being rich in wealth you are the strength of men—5.

O Agni you are Rudra the great spirit of heaven. You are the hosts of Maruts. You are the lord of food. You delight in going with the ruddy winds. Being Pusha you yourself protect your worshippers—6.

O Agni to him who adorns you, you are the giver of wealth. You are the god Savita the holder of treasure O lord of men as Bhaga you rule over wealth. You are the protector of him who worships you in his house—7.

O Agni, people place you the lord of the people in their houses, They propitiate you the most bounteous King. O handsome one, you are the lord of all—of tens, hundreds, thousands—8

Men with sacrifices worship you their father—with sacrificial wood they propitiate you to make you their brother. You become a son of him who worships you. You are friend giver of happiness. You protect us from our oppressors—9,

O Agni, you are Ribhu. You are near us to be adored. You are lord of strength and wealth consisting of food For the sake of the offerer of libations you shine and burn. You teach how to sacrifice and you spread the sacrifice among men—10.

O god Agni, you are Aditi to the libation—offerer. You are Hota, you are Bharati. You are magnified by praise. You are Ila of a hundred winters to bestow strength O lord of wealth, you are Vritrahan (Indra) ; you are also Sarasvati 11

Being well-nourished yourself, o Agni, you are giver of excellent food. In your lovely and coveted color reside all beauties. You are a great charger to save from danger. You are treasure abundant and extensive in all directions—13.

O Sage Agni, the bright Adityas have made you their mouth, have made you their tongue—The libation—loving gods follow you in the sacrifice—The gods partake of the libations offered in you—14.

O Agni the immortal All—gods united in harmony, by your mouth partake of the libations offered in you—The mortals also

relish the expressed juice through you, You produce the bright juice of plants —15.

By your strength, O well-born Agni, you unite with all gods; you also become separate from them and surpass them.

All the food that is here has been produced by your greatness Both heaven and earth follow you.

Those wisemen who give to your singers wealth with cows at its front and consisting of horses, may you lead them as well as us to superior abodes. May we accompanied by valorous sons chant a great hymn in the sacrifice.

Agni was not worshipped during the Indo-European period.

The word *Agni* [Pali *Aggi*] is supposed to be derived from the root *ag*. to move tortuously—If this is the true derivation of the word probably it at first meant lightning and not terrestrial fire—The word is met with in a number of Aryan languages in a more or less altered form.

Sanskrit	<i>Agni.</i>
Pali.	<i>Aggi.</i>
Old Slavonic	<i>Ogni.</i>
Lithunian	<i>Ugni.</i>
Latin	<i>Ignis.</i>

It should be noticed that the word does not occur in Zend though that language is more allied to Sanskrit than the last three languages mentioned above and though Agni—worship had the same origin among the Indu and the Iranian Aryans.

The Zend word for fire is *atar* which term again is not to be met with in Sanskrit though probably the word *atharvan* is derived from it. There is a Pehlvi word *ageni* which means blood or hot water. There is no doubt that it is the same word as the Sanskrit *agni*. It was noticed before that the word *dyu*—sky is also not to be found in Zend. The non-existence in Zend of two such important words as *dyu* and *agni* requires explanation. I shall take up the subject hereafter.

As stated before there is no proof that fire was worshipped by the Aryans during the Indu—European period. The existence of the same word for fire—*agni* in the languages of some of the western and the eastern branches of the race, is no evidence of it. To prove that fire was worshipped by them before their separation we must have not only the same word for fire among

them but also some word indicative of the predicate of god connected with it as we have in case of *ayans*.

Discovery of Agni.

If I am right as to the suggestion thrown above that the word *agni* at first meant lightning and not ordinary fire then not only was fire not worshipped by the Aryans during the Indu-European period but that even the process of producing it had not then been discovered. This surmise is proved to be a fact by the history of the discovery of fire as related in the Rigveda. According to it Matarisva obtained it from lightning and Bhrigu was the first to discover the process of producing it from the friction of two pieces of wood though this has also in some of the *riks* been ascribed to Matarisva.

হুমধে প্রথমো মাতরিস্বন আবির্ভব সূক্তত্বা বিবন্তে । ১।৩।৩

O Agni you first appeared to Matarisva for his good work for the sake of Vivasvan I-31-3.

বহ্নিঃ.....

ভরতু গবে মাতরিস্বা ॥১।৬।১

Matarisva gathered Agni for the sake of the Bhrigus — I-60-1.

As to who or what Matarisva was scholars have, I believe quite unnecessarily, held very different opinions. The word occurs in a number of places in the Rigveda. In most of them Matarisva can only mean an ancient *rishi*. In a few places he is Agni himself especially in the form of lightning. This is, however, easily explained. To call a thing after the name of its discoverer is not at all unusual. Then it is not simply in case of Matarisva alone that Agni has been given the name of its discoverer or early worshipper. In a similar way he has been called Agnirasa, Brihaspati, Atharva, Atri, Trita &c. No where in the Rigveda does Matarisva mean wind. This is altogether a postvedic meaning. While dealing with the *Pitris* I shall shew that Matarisva, Vivasvan, Yama, Atharva, Agnirasa, Brihaspati and Bhrigu were all human beings—the ancient *rishis*, the founders of the vedic religion. Throughout the Rigveda the *pitrīs* have been conceived as really fathers who were born on earth as men are born. It was not till the time of the Taittiriya Samhita that they were supposed to have an origin different from man.

Different statements have been made as to how Matarisva first

obtained Agni. Some of the *riks* shew that he got it from lightning ; others say that he produced it by friction.

1st স জাগমানঃ পরমে বোমজাবিরগ্নিভবনাতরিশ্বনে । ১।১৪৩।২

He (agni) born in the highest heaven appeared to Matarisva — I-143-2

আত্মং দিবো মাতরিশ্বা জভার । ১।১৩৭।৬

One of them (Agni), Matarisva gathered from heaven—I-93-6.

মাতরিশ্বা বদমিমীত মাতরি । ৩।২৯।১১

Agni is called Matarisva when he is measured in the mother (*i. e.* in the air)—III-29-11.

Measured in the air evidently refers to lightning flashes across the sky. Lightning being called Matarisva indicates that it is in the form of lightning that Matarisva first found Agni.

যং মাতরিশ্বা মনবে পরাবতো দেবং ভাঃ পরাবতঃ । ১।১২৮।২

The god whom Matarisva brought from afar, brought from afar, for man—I-128-2.

2nd—Other *riks* speak of Matarisva obtaining Agni by friction.

মথীজদৌঃ বিভূতো মাতরিশ্বা গৃহে গৃহেষ্টেতো জেজ্ঞোতুং । ১।৭১।৪

When Matarisva churned out this wandering Agni and placed the white one of noble birth in every house.—I-71-4.

যদীমহু প্রদিবো মধ্ব আধবে শুহা সন্তং মাতরিশ্বা মথারতি । ১।১৪১।৩

When in the ancient time for offering libation sweet as honey Matarisva churned him out who was hidden in the cave—I-141-3.

মথীজদৌঃ বিষ্টো মাতরিশ্বা হোতার... । ১।১৪৮।১

When Matarisva churned out this Agni—the Hota—who had hidden himself in the cave—I-148-1.

As in the other instances so in the case of the discovery of Agni the vedic rishis have mixed up different ideas. Matarisva living in the time of King Vivasvan appears to have been the first to have obtained Agni. This he did from a hut or tree set to fire by lightning. Afterwards—probably long afterwards the chariot—making Bhrigus discovered the process of producing Agni by friction or by মহ্ন্ churning as the rishis call it—In course of time the first discovery was nearly forgotten—all that was remembered was a few important facts in connection with it such as that the discovery was made by Matarisva for the sake of Vivasvan and that he brought Agni from afar, from the highest heaven, &c. The other process that of producing Agni by friction the rishis had recourse

to daily and therefore had no reason to forget. In course of time they very nearly convinced themselves that, this was also the process by which Matarisva first obtained Agni. Then remembering that it was one of the Bhrigus who discovered this process made an attempt at reconciling the two ideas by saying that Matarisva brought Agni for Bhrigu.

বহ্নিঃ.....

ভরত্ গবে মাতরিখা ১১৬০১১

This, however, is a mistake for elsewhere it has been distinctly said that Matarisva did so as the messenger of Vivasvan. The latter we must remember is the father of Yama the first man or more accurately himself the first man.

অ দূতো অগ্নিমন্তরদ্বিবন্তো বৈশ্বানরং মাতরিখা পরাবতঃ ১৬৮ ৪

Matarisva the messenger of Vivasvan brought Agni Vaisvanara from heaven, from afar—VI-8-4.

The fact of Matarisva acting as messenger of Vivasvan must not be confounded with Agni acting as messenger of gods and men. The first expression means that Matarisva acting as messenger brought Agni from heaven—which again is intended to mean or hints at the fact that Matarisva obtained Agni from lightning come from heaven. The second expression tells us that Agni is the medium of communication between men and gods. For this reason Agni is also called হব্যবাহ or হব্যবাহন carrier of *havis*—libations.

A. C. SEN.

AN IDEAL GENEROSITY—MAHARAJA USINAR.

(A SKETCH FROM THE MAHABHARAT.)

In time of yore, there was a land, situated on the confine of the river Bitasta, one of the five great rivers, that have given name to the Panjab, which was watered by the Jala and the Upajala—two tributaries of the Jumna. It was a very beautiful spot under the sun, and was greatly resorted to by saints and *rishis*, who found the place extremely helpful to the progress of their religious observances, amidst its serene and profoundly captivating nature. The land was the land of the Sivy Kings. Once there reigned a king whose name was Usinar, who was more of a saint than a king—spending most of his times in religious observances, and acquiring more of a saintly nature than that of a human sovereign. During his time he was reputed to have advanced in the sphere of religion more than Indra, the king amongst the Hindoo gods. The reputation of Ushinar spread far and wide, and the wielder of the mighty thunder conceived an unholy jealousy unworthy of his heavenly position. Really there was consternation amidst the gods, lest Usinar should usurp divine position. In the meantime Usinar announced of the celebration of a *jajna*—sacrificial fire. In every such ceremony—above all, the god of fire—Brahma is pre-eminently worshipped. Now Brahma betook himself to Indra the king and related to him of the grand ceremony that was being performed by Usinar—the prince in flesh and blood below. Indra did not like it, nor were all other gods pleased to hear of Usinar having arranged for another *jajna*, which they took to be the stepping stone to his elevation to Godship. Both Indra and Brahma had a consultation and resolved to examine as to whether Usinar was really so great and good as he was reputed to be or not. They had them transfigured; the former to a hawk, and the latter to a pigeon, and sped with considerable force to the presence of Ushinar, at the place where the ceremony was being

observed. The pigeon, as if greatly terrified, being pursued by the hawk, hid itself at the very lap of the king seeking protection. The king took the tinny thing to his confidence with tender feelings and kept it concealed from his pursuer. The hawk, as if mortified at the escape of the pigeon, whom he was eager to feed upon, imploringly asked the king to restore the pigeon, as he was awfully hungry. The hawk further expressed his impatience, in saying that as the king was not yet restoring to him his food, he would soon fall flat and expire of starvation, and in that case whole of his family would follow him to the grave. He was a great king—and why should he to secure the glory of a meritorious service, protect a pigeon that was his food. He was afraid that the king should have incurred the ignominy and crime of withholding food from one really hungry.

Now the hawk began to harrangue in the following way, for the edification of the Maharaja Usinar. "Well," said he, "you are by your attempts to save the life of one, going to kill those of many. You lover of truth! a religious principle that contradicts another, is no religion at all. You should practice religious principles that do not contradict each other, and that would be religion."

Maharaja Usinar replied "ye royal bird! your words decidedly prove that no religious principle is unknown to you; but how, then, can you ask me to surrender one seeking protection? And will that be meritorious on my part? As food is your only object you may better do without it, by securing your dinner in other ways. I, myself, may supply you with either a cow, a bullock, a boar, a buffalo, or if you desire for any other thing I may procure for you."

"No, Maharaja," replied the hawk, "I do not take beasts for my food, and you need not try to secure them for me. Please let me have that only, that is destined to be my food by the creator. The hawks take pigeons for their food."

The Maharaja in his utter helplessness said "Bird, I may give you the kingdom of the Sivi kings, or if you desire for anything else under the sun, I am ready to give you; but I shall in no way be able to surrender to you this terrified pigeon, that has taken my shelter. Please tell me for what can you give up your demand for the poor pigeon."

"Well," said the royal bird, "if the pigeon is so dear to you, you may better supply me with flesh from your own person, equal in weight to that of the pigeon, and when this done, I shall be content."

The king found himself much relieved and was greatly pleased at what the hawk said. Finding himself thus extricated from a nice fix, the king said, "I am greatly obliged to you, bird, for the kindness you have shown me. I am just supplying you with my own flesh equal in weight to that of the pigeon."

The king, with a slice, began to tear lump of flesh off from his thigh; but lo! it could not be equal in weight to that of the pigeon. The king dived the slice further, and put another piece to the scale, but even that could not make it even! the king was bleeding almost to death; and grew pale as a sheet of paper. But he cared not a jot. He was thinking, only thinking—would the Almighty God put him to eternal shame, and loss of virtue? A thought struck him. He instantly rose up to his feet, and sat at the scale to make it even. And lo! the hawk suddenly made its divine appearance, and said to the king, "I am king Indra, and the pigeon you see before you, is no other than Brahma. We have tested your regard for truth, religion and virtue. Your love for what is right, at the sacrifice of your own life, will go down to posterity; and when you have finished your journey over the span of life, you will be translated to the heaven." Saying thus, the gods vanished.

What a nice way of inducing men to follow the path of virtue and truth, even when death stares at the face! This is purely oriental. And at what a distant date such a lofty ideal was conceived! what a bright interior within a black exterior!

BIJOY CHANDRA GANGOOLY.

THE MALDIVES.

Several centuries ago the tempest-haunted Maldivian atolls in the Indian Ocean formed the Sinhalese penal settlement, and the convicts from Ceylon soon intermixed with the trading Arabs and their Negro slaves who frequented those shores, and developed into a hardy sea-faring race. Though their present descendants profess the Moslem faith and bear a strange cast of features, their dialect, their social observances, and Buddhist names of places retain traces of their origin.

An atoll consists of a cluster of islets, and over each islet is a headman (Katibu or Nayibu) who is virtually a primitive patriarch; he administers a rude form of justice, solemnizes and annuls marriages, collects a tax in kind from all persons over twelve years of age and superintends the muezzins (mudimu) of the several mosques.

The islet homesteads stand on either side of the streets, shut up from the latter and separated from each other by coral-built walls, or cadjan fences having at intervals "tat"-covered openings as entrances. A house-enclosure has within it a residing hut with a verandah and a store room, a detached kitchen and a coral well; and the fittings are swing-cradles (hundoli) to recline upon, and raised platforms (aripha) covered with mats and serving a variety of purposes: on these the inmates entertain visitors, sleep at night, stock their household goods, and take their meals of half boiled rice, dried fish (kommala mas), sauce (diya hakuru), chillies and scraped cocoanut.

The people are occupied according to their castes. The Didis or Princes of the Blood Royal assist in the government. The Manikuvanus are the merchants and owners of vessels who are generally knighted as Kilagefanu. The Thakuruvanus are the sailors and fishermen. The Kallus are the common people who draw toddy, pick cocoanuts, beat out fibre to twist into coir, make molasses and *Bondi Aluva* and *Koli Appan* preserves, weave

cloth and mats, collect cowries and work as carpenters, smiths and potters. Every islet is noted for a special industry, and the inhabitants carry their handiwork for sale to other islets in primitive boats.

Dress depends on means; the females wear a waist cloth (feliya) kept in position by a girdle, a coloured jersey (libas) reaching the knees, a head gear of the same cloth, and a set of bangles spiral in form and increasing in size from the wrist upwards. The males wear a pair of drawers (haruvalu), a waist cloth (mendu), a white tunic (libas) and a head covering (ruma) similar to the females.

Social observances are numerous and as they have not changed since Pyrard described them three centuries ago I cannot do better than quote him.* "As soon as children are born they bathe them in cold water six times in the day and then rub them with oil which they continue for a long time. Mothers nurse their children themselves and would not think of letting them be suckled by others, not even by queens; for they are wont to say that all animals suckle their own young; yet they keep servants to tend, carry and manage them. They never swaddle them, but let them go free. At the age of nine months they begin to walk; at nine years they begin to be taught the studies and exercises of the country. Fathers give their daughters in marriage as soon as possible after the age of ten years, thinking it a great sin to let a girl want a husband; wherefore they hand them over at the age of 10 or 11 to the first that asks them without making any bother, be he old or young, man or boy: provided only there is little difference in the quality, that is all they think of. The Naibu takes the man by the hand and asks him if he is willing to take such a woman on the conditions proposed, and the woman being always absent, he likewise questions her parents as to their consent. If they all agree, he marries them, and calls the bystanders to witness their consent; then the whole company waits upon the woman home, and several other persons visit her. All the visitors being entertained with feasting, music and dancing, etc.; the new married man makes presents to the king and the great lords, and the bride pays the like compliments to the queen

* From "The Voyage of Francois Pyrard" translated for the Hakluyt Society by Albert Gray (1887).

and the other ladies ; both make presents, likewise to their relations. In all their actions they are scrupulous and superstitious even in the smallest matters. When they are seated in any place others must take care to pass behind them, for to do otherwise would be held a great indignity. It is a grave indiscretion for one seated in the presence of others to swing the legs; they are much offended at it and held it to be a sign of bad luck and a piece of bad manners: so when they set out on any voyage they like not to meet or touch any person, and if aught untoward or unfortunate should happen they will lay it at the door of him who touched them. Above all when they go a fishing one must not salute them nor give them good day."

Side by side with the Mahomedan religion is the belief in sorcery. To prevent diseases the people wear charms enclosed in little boxes on their arms, neck, waist or feet; to cause diseases they make an image of the victim, drive in a nail and throw it into the sea; and to cure diseases they invoke the afflicting devil and offer him flowers, meat and drink in some solitary spot. Magic is also requisitioned for feats of jugglery. Mr, Dadadbhoy, the Private Secretary to the last Sultan, thus describes a midnight *Tarjahana*. "Twenty persons took part in the ceremony, two rows of seven each being formed facing each other, while the remaining six were on a side and engaged in chanting. The men were all provided with tambourines and while the chanting proceeded one row leaned towards one side and the other the opposite side, each man ringing his tambourine and moving about as if mechanically. Suddenly one man rose and drawing a dagger stabbed himself on the head most cruelly, and then passed the point of the same weapon through his cheeks. The blood flowed profusely and I left the dreadful scene in terror. Next morning the man was produced before me and I only found a few scratches marking the place where the dagger was introduced, and was told that the devil had protected him."

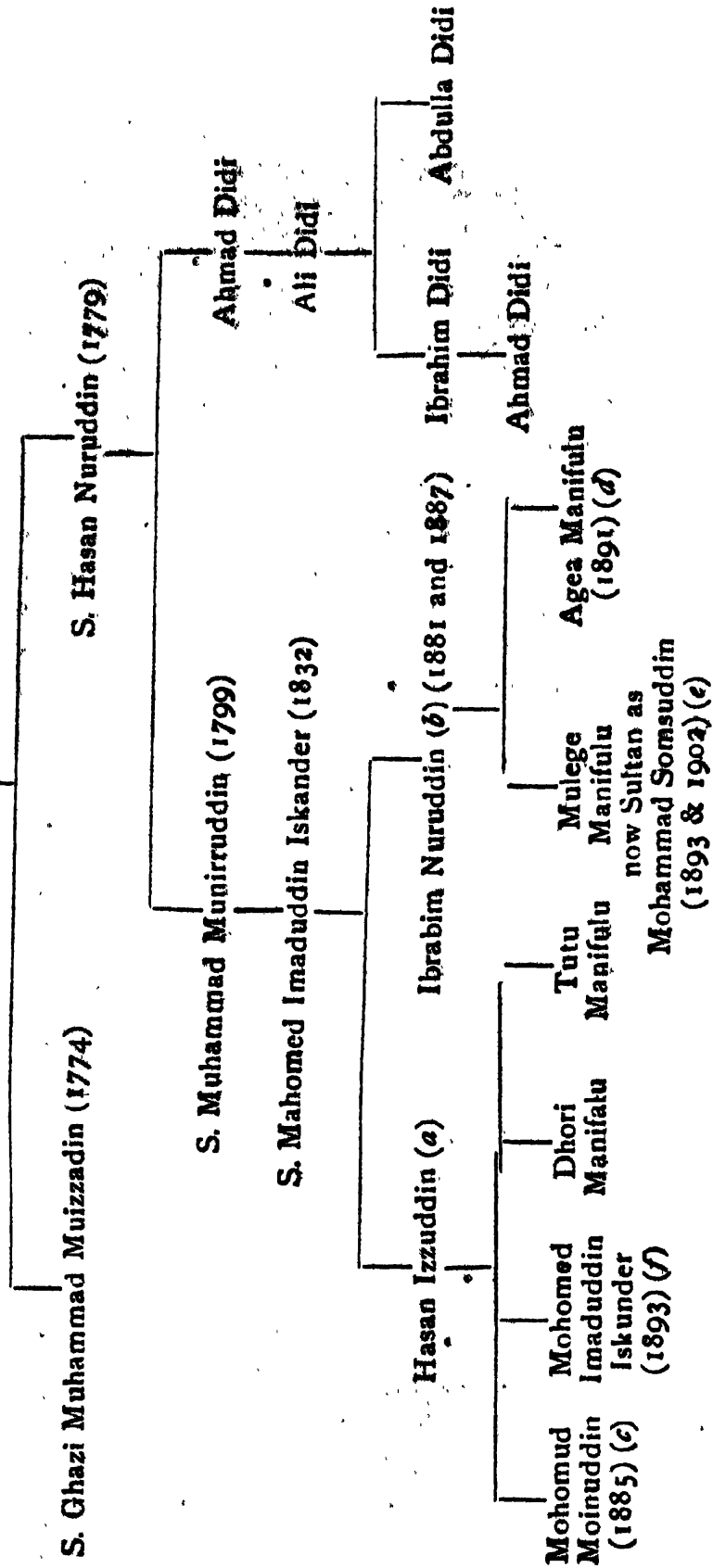
Though the Maldivian Sultanate dates from the time of the Bagdad Khalifate all that is connectedly known of its history dates from A.D. 1753; but glimpses of two previous centuries have been preserved to us by Ibn Batuta the traveller from Tangiers (A.D. 1343) and by the ship-wrecked Francois Pyrard of Laval (A.D. 1602).

In 1753 the reigning Sultan Muhammad Imaduddin Mukkaram (the brother of the Sultan Ibrahim Iskunder and son of the Sultan Imaduddin Muzaffar) was taken captive and blinded by the pirate-subjects of the Raja of Cananore, through the intrigues of the Maldivian Prime Minister; and the Government of the islands was undertaken on behalf of the Sultan's daughter Amina Rani by the official Hasan Ranna Baderi who after six years ascended the throne as Ghazi Hasan Izzuddin, probably after marrying the princess, and founded the present royal dynasty. He died in 1767 naming as his successor his master's nephew Muhammad Ghizasuddin, the son of the Sultan Ibrahim Iskunder. This arrangement only lasted for seven years for his two sons in 1774 got rid of this rightful sovereign by treachery and successively reigned as Ghazi Muhammad Muzzaddin and Hassan Nuruddin. The latter reigned from 1779 to 1799 and left two sons the Sultan Muhammad Munirruddin who succeeded him and Ahmad Didi who tried to introduce enlightened modes of Government and was compelled to seek refuge in strange lands. He fled to Mocha after a voyage which nearly cost him his life and eventually settled down at Cochin where he remained till his nephew Muhommud Imaduddin Iskunder ascended the throne in 1832. He then returned to the atolls and become a valuable adviser to the Sultan and at his death his son, the intelligent Ali Didi took his place. The two cousins however fell out and Ali Didi took up his residence in Ceylon. The appended table of genealogy and the notes attached will enable the reader to bring down the history to the present day; and it may be mentioned that the Maldivian revolutions now in progress have arisen by the ambition of the descendants of Ali Didi to obtain an upper hand in the Maldivian Councils as their great ancestor Ahmed Didi had done.

A. A. P.

GENEALOGICAL TABLE OF THE MALDIVIAN SULTANS

Hasan Ranna Baderi raised to the throne as S. Ghazi Hasan Izzuddin (1759)



(a) Eldest Son and blind since 12 years of age.

(b) Occupied throne as Regent in 1881 ruled 4 years till 1885 and retired in his (c) nephew's favour. By intrigue he again occupied the throne in 1887 and died in 1893.

(c) Declared Sultan in 1885, ruled 2 years till end of 1887. Owing to intrigues of (b) his uncle he gave up his Sultanship and died in 1889.

(d) When he was 7 years of age intriguers declared him Sultan as Mohammed Emaduddin in 1891. He ruled for 6 months and was dethroned by the people.

(e) Intrigue made him Sultan in 1893 and he reigned for 3 months (October to December) but was deposed. In 1902 he again became Sultan and is now reigning.

(f) In December 1893 he was declared Sultan. On 11th September 1902 he proceeded to Suez for his marriage with an Egyptian lady of rank appointing his brother Dhoru Manifulu as Regent. On 11th March 1903 the present Sultan. (e) deposed the Regent and ascended the throne. The Ceylon Government refused to interfere. The deposed Sultan is now in Egypt.

ADMINISTRATION OF THE AFFAIRS OF CEYLON.**1896-1903.**

[EXTRACT FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW.]

IV.**THE WASTE LANDS ORDINANCES AND LAND SETTLEMENT.**

During the period of my administration of this Colony no subject has more constantly occupied my attention than the settlement of doubtful titles to land.

I have said that it is a question of great importance ; I might go further and say it is the question of paramount importance to this Colony at the present day. In justification of this contention I would remind you that out of the 16,000,000 acres embraced within the limits of this isle only 4,000,000 are under cultivation. It is on this one-fourth of the Island that its present prosperity depends ; in the development of the remaining three-fourths is wrapped up the future of the Colony. It is vain to say that the present cultivated area represents the cream of the land, and that the remainder is comparatively valueless. We have the testimony of the past that vast tracts of country at present almost entirely uninhabited at one time supported a teeming population and I confidently assert that, in the course of a few short decades, history will repeat itself and these extensive areas again come under cultivation.

Thus much for the importance of this asset in the progress of Ceylon. The future of the community being, as I have said, bound up in it, the responsibility of the Crown in this matter is second to none. The duty of Government is clear.

The chief *desiderata* in any fresh legislation on the subject were accordingly, (a) provision for the discovery of disputed lands ; and (b) provision for the rapid and effectual settlement of the claims so brought to light, in the first place, if possible, by way of amicable settlement ; in the second, if friendly overtures

were rejected, by way of reference to the regular civil tribunals. At the same time it was evident that, without a clear definition of the areas in dispute no permanent settlement could be effected.

The principal features of Waste Lands Ordinance as passed are, (1) that claimants are now bound to come forward and state their claims to land proclaimed under it, leading such evidence before the officer conducting the inquiry as may substantiate their rights; (2) that it provides for amicable settlements being entered into speedily and yet with legally binding effect; and (3) that provision is made for the acceleration of the trial, free of stamp duty, in a civil court, of claims in which amicable settlements are not arrived at.

There is nothing in these provisions of a drastic nature likely to weigh unduly on the subject, and one would have thought that a simplified procedure for the settlement of these disputes would have been welcomed. This, however, was not the case. The speculators saw in the definition and regularization of these doubtful titles the collapse of their scheme for annexing Crown lands and for enticing the ignorant villager to part with his ancestral holdings at a fraction of their real value, and, accordingly, whilst forced by the universal consensus of opinion to admit the desirability of a speedy adjudication of claims to land that had placed the subject and the Government at variance, they did not hesitate to initiate a campaign of opposition which, for daring misstatement of fact and impeachment of the good faith of this Government, stands probably without parallel in the history of the Island,

Time, however, has shown that honest claimants have no reason to dread the present law. They have but to come forward, produce the evidence that exists in their favour, and they are sure of being treated with justice—nay, with liberality. It is the unscrupulous speculator, the dishonest claimant, the wholesale maker or utterer of forged deeds, that have grounds to dislike the prompt procedure provided, which brings their misdeeds to light when least expected, and not unfrequently ensures their punishment in a criminal court.

The Ordinance has now been in force for over five years. It has, as I have already indicated, worked smoothly, and no cases of injustice have been brought to my notice. In all cases

which during the last two years claimants have elected to go to Court, instead of coming to a settlement with the Special Officer the Crown has had no difficulty in proving its title to the land and in the appeals so far heard similar success has resulted. But in the great majority of these cases the claimants were not villagers interested in the land which they claimed on ancestral title; but wealthy speculators, who had brought up vague and often unfounded claims for prices ridiculously inadequate. The people are now well aware that all reasonable and *bona fide* claims will have the sympathetic consideration of the Settlement Officer and it is only on rare occasions that they do not accept his decision, experience having taught them that they are much more likely to obtain advantageous terms from him than if they apply to a court of law to award them that to which they may be legally entitled. In short, the question has now passed beyond the region of controversy, and the very great and lasting advantages which accrue, both to the Government and the people, from the introduction of the system, have become so apparent as to be incontrovertible. Hostility to the Ordinance has died out, and it is now regarded as a fair, cheap, and practical means of settlement of land claims.

To the Government the system secures a documentary title based on a regular survey to all the land which it claims.

To the people the advantages of a permanent settlement are even greater than to the Crown. Uncertainty of title was an effectual bar to permanent improvement of all kinds: money would neither be advanced nor spent on land the title to which consisted in an allegation that it had been cultivated at intervals during the last thirty years. The land could not be sold at anything like its fair value, for no lawyer would approve an investment on such a basis. Sale by the Crown was almost impossible for similar reasons: its title was as dubious as that of the villager. A more insurmountable obstacle to progress of any kind can hardly be imagined. When a village has once been settled the land question, which has been for generations the great cause of discord between Government and the villager, at once and for ever disappears. It will readily be seen how great are the advantages of the system which secures this end.

The work has proceeded the necessity for a complete

settlement of each village, that is, of all the lands, both cultivated and uncultivated, has become more and more obvious.

To provide for this a Land Settlement Department has now been constituted. It will consist of two divisions: the one dealing with waste lands under the provisions of the Waste Lands Ordinance, the other with cultivated lands in accordance with the existing regulations of Government. The department will be presided over by a Land Settlement Officer with the powers of a Special Officer under section 28 of the Waste Lands Ordinance, aided by assistants with similar powers, the whole department being under the supervision of one of the most experienced members of the Civil Service, a member of the Executive Council. So far one assistant has been appointed for the North-Central province. But as soon as he has gained experience others will be required, in order that this important undertaking may not be retarded. It is probable that if a sufficient staff is provided, the bulk of the necessary settlements can be completed within a few years, and expenditure on settlements can then be greatly diminished, if not discontinued.

THE TECHNICAL COLLEGE.

One of the items of the programme which I sketched in my first address to this Council in 1896 was the re-organization of the Technical College, in order to make it, among other things, the training ground for the so-called scientific departments.

At the close of 1896 the Technical College contained ten pupils only, studying in the departments of civil and mechanical engineering. The teaching staff comprised the superintendent and two assistant instructors. The premises consisted of a drawing office, two small class rooms, one lecture room, a room used for experimental physics, and a long corridor used as a workshop.

In pursuance of the policy I announced in the passage which I have just quoted, the college in 1897 underwent a thorough re-organization, with a view of making it the training ground for recruits to the chief technical departments of Government, namely, the Public Works and Survey Departments, the Government Railway, and the Telegraph department of the Post Office. The staff of the college was strengthened by the appointment of

instructors in surveying and levelling and electrical engineering, and an assistant instructor in the latter subject. At the same time additional accommodation was provided by the erection of a temporary building for the workshops. The number of departments in the college was increased to four, namely, civil engineering, telegraphy and electrical engineering, surveying and levelling, and mechanical engineering. To these has since been added a fifth department, that of drawing, which was opened with the primary object of providing instruction for teachers. Evening classes have recently been started and have met with a very fair measure of success, and when the new college buildings are completed they should undoubtedly prove a great attraction. The number at the college rose in 1897 to 43, and in the following year to 77. The present number is 254. Since the re-organization of the college 27 students have passed the final examination in civil engineering, 12 in mechanical engineering, 3 in electrical engineering, 25 in surveying and levelling, 96 in telegraphy for the Railway Department, 29 in telegraphy for the Postal Department, and 15 in drawing. The number of students drafted into Government service since 1896 is as follows: civil engineers 24, mechanical engineers 8, telegraphists 125, surveyors 9. Of the remainder, 7 civil engineers are employed in private firms, 12 are practising as private surveyors, 15 are teaching drawing in schools. The staff of the college consists at present of nine instructors and assistant instructors besides the superintendent.

Besides those already referred to, who have obtained employment in Ceylon as a direct consequence of their college training, eleven Ceylonese students have received appointments in other countries, as follows: four engineers, two surveyors, and two telegraphists in the Straits Settlements; two surveyors in Siam and British North Borneo; and one engineer in the Calcutta Municipality. On the other hand, the Government of the Gold Coast Colony of Africa has sent four youths to be trained in Ceylon in engineering for the Public Works Department of that colony. Two have finished their training, and have been duly appointed on their return home. Two others are now in Ceylon, and have finished their course at the college. It has happened more than once that the demand for qualified students of the college has outrun the supply.

As a case in point, two survey appointments were recently offered by the Government of the Straits Settlements to qualified students of the Ceylon Technical College, but the appointments could not be filled from Ceylon because there were no unemployed candidates available. These facts prove that there are excellent prospects for steady and persevering students who are determined to take full advantage of the training provided at the college. The records in fact show that no student of the college who has qualified has failed to obtain good employment either in Ceylon or in other parts of the Empire.

The organization of the Technical College and its relations with the various departments still present occasional difficulties, but its main object has certainly been attained, *vis.*, to provide a sound training for those who are selected locally for the scientific and technical departments of Government service, and also for those who wish to practise as engineers, surveyors, &c., in private life.

EDUCATION.

And now, Gentlemen, I approach the thorny subject of education. I say thorny, for the Ceylon Government occupies a difficult position between the rival camps of those who declare that it does too much and of those who contend that it does too little. The latter are the louder and more ubiquitous, and their voice is to be heard from all sides, even from across the seas. They complain that your money is being thrown away into a bottomless abyss of ambitious railway projects and irrigation works, while the more prosaic, but not less important, departments of Government are starved for want of funds. It may therefore surprise you, Gentlemen, to hear that in no department of the administration, with the exception of the departments presided over by the Director of the Botanic Gardens, the Master Attendant of the Colombo Harbour, and the Surveyor-General, has expenditure increased so fast during the last seven years as in the Education Department. The amount spent on education in 1896 was Rs. 668,274, whereas the amount voted for this year is Rs. 1,023,649, an increase of 53 per cent. As the estimated revenue for this year only exceeds the actual revenue of 1896 by 23 per cent., I do not think that the most fervent educationalists can fairly charge the Government with indifference to the cause they have at heart. Ceylon has indeed every reason to be satisfied with the progress of education during recent years. For

very nearly half a century after British occupation little or nothing was done by the Government, and indeed it is only within the last thirty years, that is to say, since the establishment of the existing Department of Public Instruction, that any real progress has been made. In 1869 there were only 85 schools, Government and aided ; now there are 1,939.

I do not say that even the million rupees which are now voted, adequately provide for the educational needs of the Colony, but I do claim that the figures I have quoted show that the Government does its best to supply these wants in a generous spirit. Moreover, when people point to the sums voted in the estimates as evidence of the small amount spent on educational in Ceylon, they forget that these sums do not in any way represent the total amount so spent. The educational system of this Colony is peculiar. The Government expenditure on grants-in-aids amounts this year to Rs. 532,777, but a much larger sum must be contributed by the Mission Societies. What the exact amount expended by the missionary and other societies may be we have no means of knowing, as we do not demand such details from the various private bodies engaged in education, but it is clear that the grants to aided schools cannot represent nearly all the cost of maintaining those schools.

Education in Ceylon is greatly indebted to private enterprise. Leaving out the small unaided schools and colleges, there are 1,939 schools in the Colony ; of these, 515 are Government schools, the remainder being supported by the different societies and communities—Protestant, Roman Catholic, and in a less degree Buddhist, Hindu, and Mahomedan. All receive grants-in-aid, in the shape of result fees, from Government, and without this assistance they could not exist ; but, on the other hand, were private enterprise to retire from the field, Government would have to face two alternatives: either to close two-thirds of the schools in the Island or to more than double its expenditure. Moreover, in the existing Government schools—with sixteen exceptions—only the vernacular is taught. English education is practically left to private enterprise.

The harmony with which the present system works is remarkable.

The history of education in Ceylon during the last eight years has been one of steady development, and numerical progress has been accompanied by important steps for insuring that the teaching
 and, and that the practical and useful side of education

should not be neglected. The number of Government and aided schools has increased from 1,573 to 1,939, and the number of pupils in these from 1,34,481 to 189,403, while the total number of children receiving education, including those taught in unaided schools, has risen from 169,831 to 226,407, an increase of more than 25 per cent.

The question arises, What proportion does this number—226,407—bear to the total child population of the Island?

Even this proportion is, moreover, misleading, and does not fairly represent the extent to which education is now reaching the rising generation in this Island. The figures I have quoted include both sexes, but it must be remembered that in the East caste and custom are notorious obstacles to the education of women, and among a large section of the native population education is confined almost entirely to males. Bearing this important fact in mind, let us examine for a moment the figures for 1902. The number of boys under instruction was 165,238, and, assuming four years as the average duration of school life, I calculate that the number of boys of school age in 1902 was 119,370. In other words, 87 per cent. of the boys of school age were receiving education, no less than 137,478 out of the 189,370 being in Government and aided schools. The figures, for girls are of course much less favourable, but, considering the prejudice against female education which still undoubtedly exists, I think it may be regarded as satisfactory that as many as 61,169 out of a total of 163,366, girls of school age, or 37 per cent., are under instruction.

I am the more glad to have this opportunity of correcting the mistaken impression likely to be derived from the census figures, because in the last session of the Imperial Parliament certain questions were asked with regard to education in Ceylon, which contained very inaccurate and misleading figures and statements.

Much, however, undoubtedly remains to be done—more than can possibly be done by the central Government alone. On the assumption that the average duration of school life in Ceylon is four years, there were in 1901 over 128,000 children who were receiving no education. That number was reduced that year to 126,000, while as we have seen, the number under instruction was 226,407; but it must be noted that about 16 per cent. of these are in unregistered schools, among which we

have to reckon the schools attached to Buddhist temples and Mohammedan mosques. The Director of Public Instruction estimates that, in order fully to provide for the educational wants of the Colony, it would be necessary to double the education vote. But, there must be some limit to the contributions from general revenue, and as I have pointed out in my previous addresses when opening this Council, the solution of the difficulty must be looked for in local financial effort. How this local support is to be secured is one of the questions that is now engaging the earnest consideration of the Commission on the Incidence of Taxation.

I regret to say that the municipalities do not show a good example to the humbler self-governing bodies in the respect. For instance, the Municipal Council of Colombo do nothing for education within the limits of their jurisdiction. The law authorizes them to do so, and it is for the consideration of the Commission whether the obligation should not be made compulsory, to some extent at least.

In contrast to this lack of interest in education on the part of the authorities in the large towns it is refreshing to hear of an interesting attempt at self-help in far-away Tamankaduwa in the North-Central province.

My own opinion is decidedly in favour of extending the knowledge of English. I do not believe that we shall drive back the tide of progress and civilization by keeping the people in ignorance and darkness. Inconveniences may follow the knowledge of English, but the gain is greater. Superstitions are exploded and foolish theories exposed, for there is no greater danger than ignorance. Moreover, Ceylon is too small for any part of it to be completely outside the range of English influence. There are probably very few children who have not seen Englishmen, or heard the English language spoken by passing Englishmen or their own more or less educated countrymen. When a child grows older it becomes more sensible of English influence. The village schoolmaster perhaps speaks English; in any case, the Government inspector speaks English; in any case, the Government Agent speaks English. Even missionaries do not all speak Sinhalese or Tamil. Other advantages of some knowledge of English are obvious. It enhances the usefulness of servants, and indeed for employment in all but the very lowest capacity it is practically essential.

It should be remembered also, as an important consideration in deciding this question, that Ceylon, unlike India, has adopted English, and not the vernacular, as the language of its courts, and consequently the people have a right to claim reasonable means for acquiring a knowledge of the language in which they have to plead and defend themselves in their appeal for justice. I do not wish to prejudge a question which should only be decided after much deliberation and carefully studied experience, but the policy which I have encouraged, and which I hope will be adopted by my successor, is the warm encouragement of the teaching of English in all schools where it can be taught by competent teachers, and where education in the vernacular is not neglected. The system must necessarily be slow in development, for it will, I fear, be a long time before there are a sufficient number of properly trained teachers to justify the introduction of English as a subject in many of our schools, Government or aided.

More attention is paid to the physical development of the children than used formerly to be the case. The most important event in this connection is the formation of the Cadet Battalion of the Volunteer Force, to which I shall have occasion to refer at a later stage of this Review: the movement is still comparatively in its infancy, but it has made a most promising start. Ordinary drill is compulsory at all Government schools, and is the subject of special notice at the annual examinations and at the surprise inspections. Good results of this activity are already manifest as regards the briskness, prompt obedience, and upright bearing of the scholars, and it is especially satisfactory to know that out-door games are increasing in popularity. This has naturally led to an increasing demand for playgrounds, which have been provided by the revenue officers wherever possible.

The practical side of education was in 1896 provided for by two Government institutions, a Technical College and a School of Agriculture, neither of which was in a satisfactory condition.

No important change of policy as regards higher education has taken place during the years under review.

The Royal College is still maintained as a Government institution.

The policy of maintaining one Government institution devoted to higher education has much to recommend it. It affords a

guarantee that those who do not wish to send their sons to denominational schools will not be deprived of the best educational advantages; it also does much to maintain and raise the standard of other institutions.

I have carefully considered the question of the establishment of a local university: my conclusion is that we cannot afford to have a good university, and that we are better without an indifferent one. At the same time the attention of Government is still directed to the question whether our higher education cannot be so organized as to form a system in direct connection with the University of London or some other university, so that it may be possible for Ceylon students to obtain a recognized degree without leaving the Island.

THE ROYAL BOTANIC GARDENS.

The Royal Botanic Gardens Department has developed in a manner equally striking and gratifying. So wide indeed has been the range of this development that its title, which used to indicate fairly accurately the scope of its activities, now very inadequately describes the varied functions of one of the most useful branches of the public service. Very shortly after assuming the administration of the Colony I was struck with the great possibilities of the department as an aid to agriculture in Ceylon; valuable services had been rendered in the past in the introduction and diffusion of such plants as cinchona and cacao, but, comparatively, the day for important work of this kind was past, new possibilities of usefulness called for recognition, and the history of the gardens as a modern institution for affording scientific aid to agriculture practically recommences in 1896.

Botanical and horticultural work had been carried on since the foundation of the gardens in 1821, but when I took over the reins of Government in 1896 the department was entirely different in its size, scope, and activities to that which exist at the present day.

On Dr. Trimen's retirement, four months after my arrival, the present Director, Mr. J. C. Wallis, then Assistant, in Botany in Glasgow University, was appointed. He had not been long in the Island before he reported that an immense amount of scientific work remained to be done in Ceylon: botany, the study of the fungi of Ceylon, especially of the disease-producing parasitic fungi, being

almost untouched. He pointed out that there was much to be learnt about the physiology of tropical plant (on which knowledge the application of science to practice is mainly founded), their modes of life, the chemistry of soils, manures, &c., the principles of tea-making, rubber-curing, and such subjects, and innumerable other questions. It was obvious, however, that Mr. Willis could not find time for more than one such investigation at once, and provision was therefore made for a scientific assistant from 1898 onwards. The first appointment under this scheme was that of Mr. J. Parkin, who devoted attention to the best ways of collecting and preparing rubber: his method, modified as subsequent practice has shown to be advisable, is now largely used, and Ceylon rubber is obtaining the highest market prices at the present time. This proved the first of a series of appointments of experts who have been of the greatest possible value in the scientific examination of the many practical problems which confront the planters of the Island. In fact, no other department in the administration has received such a notable accession to its strength. The European staff, which in 1895 consisted of the Director, with the superintendent of the hill garden and a head gardener at Peradeniya, now includes six trained scientific men and two skilled horticulturists. Thus, besides the Director, there are now the Government Mycologist and Assistant Director, the Government Entomologist, the Government Chemist, the Controller of the Experiment Station, the Scientific Assistant, the Superintendent of Hakgala Gardens, and the Curator, Peradeniya Gardens. The duties of each of these officers vary, but they are all engaged in investing from a scientific point of view different questions in relation to the botany, entomology, and agriculture of the Island, with a view to communicating the knowledge gained to the planting and agricultural communities. The department, in short, now exercises the functions of a bureau for information and advice on questions relating to botany, agriculture, horticulture, entomology, plant pathology, chemistry, and other subjects. The Government Mycologist and Entomologist frequently tour through the planting and other districts to study the appearance or condition of any pests by which the Island's crops are attacked. They attend meetings of planters in various centres, where discussion takes place on planting questions, and are always ready to give technical information.

As in the case of most new departures, many criticize or even

deny the value of the appointments and of the work of the Mycologist and Entomologist. Their reasons usually prove on analysis to be more or less personal; they do not receive the undivided attention of these officers, or the cultivation in which they are most interested does not receive it, or, as is not infrequently the case in diseases of plants as in those of mankind, no simple or practicable remedy can be found for the particular disease in hand. Few people realize that the diseases of plants are as common, as insidious, and at least as infectious as those attacking animals or mankind. A disease is not infrequently allowed to spread over an estate until it becomes a serious epidemic; the aid of the Mycologist or Entomologist is then invoked, and because he cannot at once eradicate the disease at little or no cost to the estate his work is condemned as useless. As reasonably might one expect a solitary medical officer, unhelpt by sanitary legislation, to deal single-handed with malaria or enteric fever in Ceylon, and blame him because those diseases still claim their numerous victims. But the best justification of these appointments lies in the fact that so many applications for aid are made to the two officers mentioned that they are almost too much occupied in attending to them, to the detriment of the work of studying the life-history of diseases and methods of prevention. Only by the most rigid economy of time is it possible for them to secure the necessary opportunities for this, the more important section of their work. Gradually, no doubt, public opinion will become more awake to the importance of early and proper treatment of disease and to the danger of allowing uncared-for patches of cultivation to become nurseries of disease, continually re-infecting the neighbourhood. Under the stimulus of competition it will be recognized that it pays to have clean and healthy cultivations.

In my review of the trade of the Colony during the past seven years I drew your attention to the fact that the Colony is slowly but surely becoming less and less dependent on one staple, and in my previous addresses to you I have frequently emphasized the importance of encouraging new products. The Royal Botanic Gardens Department affords admirable opportunities for experiments in this direction.

Turning to new products in detail, probably the most important is Para rubber. The rubber industry is increasing rapidly, and large areas in various parts of the world are being planted with this valuable product.

Rubber may now be looked upon as a firmly established industry, and it is estimated that from 10,000 to 12,000 acres are already planted with the product. The best methods of procuring the rubbers and preparing for the market have been especially investigated by the department and the results published. The estates which have already come into bearing are yielding large and steady profits. During last year several tons were exported to England and sold at a price of about 4s. per lb. The export for the first three quarters of this year was 30,000 lb. Ceylon rubber is considered to be of the best quality in the market, and if care continues to be taken in preparation there is no reason why the present position should not be beginning of a trade which may well expand during the next five or six years to annual shipments of from one and a half to two million pounds, worth perhaps between £300,000 and £400,000. It is evident, moreover, that, instead of being limited to 10,000 acres, as well calculated a few years ago, rubber (in its several ready-growing and remunerative species) may yet cover as great an extent as cacao, *i.e.*, 35,000 to 40,000 acres and the trees on such an area ought, when in full bearing, to yield from six to eight million pounds a year of the crude product, which is so much in demand in Europe and America.

Camphor, introduced by the Royal Botanic Gardens Department, has succeeded well in many places where it has been planted, and bids fair to be a useful and profitable minor product. The price of camphor is exceedingly high (from 140s. to 150s. per cwt.), it being of great value in the manufacture of celluloid and for many other purposes.

Tobacco cultivation has not greatly increased during the last seven years.

Experiments have been tried by the gardens and by planters which demonstrate the possibility of growing good rhea in Ceylon. Owing to the lack of good machinery for dealing with this fibre, and the recent extension of mercerised cotton, which competes with rhea on its own ground, there seems, however, but little hope of this fibre becoming a profitable industry at present.

Vanilla has been planted in many districts during recent years, but the severe fall in price that has lately occurred will probably be somewhat discouraging.

Pepper has been planted in a few localities, and continues to

expand slowly, but there seems little likelihood of any considerable export trade springing up at present.

Attempts have lately been made to resuscitate cinchona, once our largest staple, by the introduction of the very rich Java varieties; it is as yet, however, too early to speak as to the prospects of this industry.

Coca, the source of cocaine, introduced years ago through the Botanic Gardens, is now cultivated in some districts, and Ceylon leaf frequently appears upon the London market, obtaining the highest prices.

Cardamoms have proved a remunerative cultivation in recent years, and the area under cultivation, as well as the exports, have continued to increase. It is estimated that nearly 10,000 acres are now planted with this product, as compared with about half that extent in 1896. The export has risen from 415,585 lb. in 1896 to 615,922 lb. in 1902. Latterly there has been a fear of over-production of cardamoms as of tea, but it may be hoped that the steps taken to interest new markets in Australia and America, as well as in Europe, will prevent any further lowering of price, though caution is necessary not to extend cultivation until a steady market is assured.

The export of citronella oil has until recently continued to increase, but there has been a decline in price, owing partly to over-production, but chiefly to inferior quality and adulteration. Lately also the Java planters have taken up the industry, producing a first-rate pure oil which has recently been selling at 2s. 1d. per lb. in Europe, as against 10d. for Ceylon oil. The problem of how best to rescue our industry from the dangers threatened by this competition is now engaging the careful attention of the Botanical Department.

Among other products which have also received attention lately may be mentioned guttapercha and ebony, with its allied timbers calamander, &c.

A possible new industry—or perhaps, more correctly, revival of an old one—which has been considerably canvassed in the press of the Colony this year is cotton cultivation. It has been pointed out that the present is a peculiarly opportune time for reviving cotton growing in Ceylon. Determined efforts are being made in Lancashire to make the Empire independent of foreign countries for its cotton supply, and any colony, therefore,

which possesses suitable land for cotton cultivation has a chance of initiating a new and profitable industry. Now, it was demonstrated some years ago that certain parts of Ceylon are adapted for this cultivation, and they are moreover the very parts which stand most in need of development. I have already given you some idea of the productiveness and capabilities of the country through which the northern railway will run, and there is no doubt that there is a considerable amount of land which will grow cotton if sufficient rainfall or water-supply is available. The chief question is whether Ceylon cultivators can grow a good staple, better than the inferior Indian staple which was formerly cultivated in the Island, and which, as at present grown in India, yields a poor return in price. I have recently sanctioned an experiment on carefully considered lines under the supervision of Mr. Willis. It has been decided to set apart an area of some 80 to 90 acres in the North-Central province, and make a fair trial not only of Indian, but also of American and Egyptian cotton. Efforts will also be made to induce private enterprise to take up the cultivation by grants of land on easy terms, while it is also proposed to encourage the industry among natives by a distribution of cotton seed on credit. We must be prepared for a certain amount of unremunerative expenditure for a time, but the sum involved is comparatively trifling, while if the experiment is successful, the results should prove of far reaching importance.

There seems to be a probability that Ceylon may in course of time become the home of a small silk industry. So far back as 1873 successful but isolated experiments were made by private persons, and last year some silkworms were raised from Italian seed imported by the department and were kept for stock purposes. The resulting eggs were submitted to a cool temperature for six months, after which they were allowed to hatch, and the worms were raised at the Royal Botanic Gardens. Some of their cocoons were sent to England to an expert who reports that the silk produced therefrom is of very good strong quality, comparing favourably with that produced in Cashmere. Large nurseries of mulberry plants are now being distributed throughout the Island with the assistance of the Government Agents. When the trees have become established and have

sufficiently grown it is proposed to issue silkworm seed to the various recipients of plants for more extended experiment.

Cacao cultivation has shown a most welcome vitality in the face of grave danger. The extent of land planted cacao has risen from 21,000 acres in 1896 to about 35,000 acres in 1903, while the export of the product has extended from 31,000 cwt. to 60,000 cwt.: that is to say, the production of cacao has almost doubled during the last seven years, and it is still increasing. Yet in the beginning of my administration a mysterious disease, the cause of which was unknown seriously menaced this important industry, and in 1897 a Plant Pathologist was sent out from home and paid partly by Government and partly by the cacao planters. As the result of his investigations the cause of the evil was ascertained, and the measures which he proposed have since been generally adopted and have prevented the threatened extinction of this plant, which grows and produces in Ceylon better than in the great majority of cacao countries. 'The Government are at present considering whether means cannot be taken to protect the majority of cacao growers from the short-sighted policy of a small minority, who do not take proper precautions to prevent the spread of the canker, and who are consequently a constant danger to the rest of the cacao estates.

The successful issue of the combat with the cacao canker is gratifying testimony to the practical utility of the Botanic Gardens Department, and is a striking illustration of the change which has taken place of late years. Since 1896 the planter, both European and native, has had created for him a Government Advice Bureau, where he can and does apply for information on all matters affecting his crops and their profitable cultivation, he also has had provided for him a State Station, where experiments are made improving the plants already cultivated and in introducing new plants which may prove of economic value, and he can consult experts who, by their knowledge of the nature of the evils causing plant diseases, can suggest means for fighting these enemies and reducing the losses caused by them to a minimum. In a word, the Royal Botanic Gardens Department not only possesses some of the most instructive and beautiful gardens in the world but, by virtue of its remarkable influence on

our great agricultural industries, may well promise to be the main-spring of the Island's prosperity.

TEA.

In my comments on your trade return again in the foregoing estimates of the prospects of your staple products I expressly reserved one product for separate notice, and accordingly I proceed very briefly to review the fortunes of the great tea industry, on which the prosperity of this Island still mainly depends. The eight years of my administration have seen vicissitudes in the prospects of our staple industry: many and gloomy have been the forebodings from time to time, but the planters of Ceylon, by their energy and enterprise, their care in cultivation, and their wise appreciation of new conditions, have successfully surmounted the many adverse circumstances and effectually maintained the flourishing condition of the industry. It is true that the prices realized to-day are appreciably lower than the prices of eight years ago, and it is unlikely that those prices will again prevail; on the other hand, recent years have seen a very marked expansion of the trade in the development of new markets, and, judging from the latest reports of the state of the oldest and richest plantations in the Island, I am glad to think that I leave the tea enterprise, both in the field and in the market, in a healthy and vigorous condition.

FOREST DEPARTMENT.

When I assumed the administration of the Government the condition of the Forest Department were very far from satisfactory.

The re-organisation the department took place exactly ten years after its inauguration in 1889, and once more it made a new and vigorous start. When the profit earned and work carried out previous to 1896 are compared with the profit and work during the last seven years, it will be seen how the department has benefited by the re-organisation and by the efforts which have been made to raise it out of the stagnation it was in at the commencement of my administration. Since 1896 the average annual deficit of Rs. 19,925 has been changed into an average annual surplus of Rs. 88,675, and during the seven years 1885-1902 the Forest Department contributed to the general

revenue surplus balances amounting to Rs. 620,725. This satisfactory result has been brought about partly by more economical administration, partly by increased sales and enhanced prices realised at the central timber depot, and partly by the more extended activities and increased efficiency of the staff.

Since 1896 the progress made in forest work proper is also satisfactory. The total area reserved up to 31st December, 1895, amounted to 54,250 acres only, but since then no less than 385,382 acres have been brought under the Forest Ordinance. The effective protection thus afforded to this large extent of Crown land has gone far towards putting an end to the systematic plundering by timber thieves.

As regards demarcation, up to 31st December, 1893, only 54,246 chains, or 678 miles, had been cleared, whereas from 1896 up to 31st December, 1902, no less than 317,361 chains, or 3,967 miles, were opened.

The central timber depot, Colombo, has chiefly contributed to the surplus revenue, and its importance is increasing every year. The total receipts for the seven years prior to 1896 amounted to Rs. 332,532, whereas from 1896 up to the end of 1902 they amounted to Rs. 784,502. This striking advance of more than 100 per cent. in the receipts of the central depot is due mainly to the closing of provincial depots and to the high prices now realized for ebony and satin.

Mr. A. F. Broun, who had been Conservator of Forests was since 1891 transferred to the Egyptian Forest Service, and at the beginning of the year the services of Mr. J. L. Pigot of the Indian Forest Department were obtained on loan from the Government of India for a period of eighteen months. Mr. Pigot's observations have shown that it may prove desirable to amend in certain directions the principles and practical methods governing the management of Crown forests in Ceylon, and his report will no doubt receive the careful consideration of my successor.

OF A CONTENTED MIND.

When all is done and said, In the end thus shall you find,
He most of all doth bathe in bliss that hath a quiet mind ;
And clear from worldly cares, to deem can be content,
The sweetest time in all his life in thinking to be spent.

The body subject is to fickle fortune's power,
And to a million of mishaps is casual every hour ;
And death in time doth change it to a clod of clay,
Whereas the mind, which is divine, runs never to decay.

Companion none is like unto the mind alone ;
For many have been harmed by speech, through thinking few or
none :

Fear oftentimes restraineth words, but makes not thoughts to cease,
And he speaks best that hath the skill when for to hold his peace.

Our wealth leaves us at death, our kinsmen at the grave,
But virtues of the mind with us unto the heavens we have ;
Wherefore, for virtue's sake, I can be well content,
The sweetest time of all my life to deem in thinking spent."

VAUX.

REVIEW OF BOOKS.

Hindu Religious Endowments' Bill, and Charitable Endowments' Bill in the Travancore Legislative Council.

We have before us a reprint of Hindu Religious Endowments' Bill, Mr. Nagam Aiya's speech delivered at the Travancore Legislative Council on the Hindu Religious Endowments' Bill and the Report of the Select Committee thereon and the Charitable Endowments' Bill. The moving spirit of the Bills is Mr. V. Nagam Aiya whose name has become a household word in the State of Travancore, who, by sheer dint of perseverance and energy elbowed his way into the front rank in the State. Instances of misappropriation, malfeasance, misfeasance and gross negligence in the administration of the trust are too well-known to require any elaborate notice here. People suffer from the inconvenience resulting therefrom, but whenever any reform in the shape of legislative enactment is proposed, they enter their protests. It goes without saying that the trusts relating to Hindu religious and charitable endowments ought to be conscientiously discharged but in the actual field our experience is quite the reverse. Dishonest managers must be watched and corrected. Honest trustees must be helped and encouraged. In other words, stress should be laid on the doctrine of *Cypress*, so well-known in English law, that is to say, the intentions of the original donors should be strictly followed and fulfilled. When we see that the ideal is not reached by erring trustees, sovereign authority ought to come in to set them right. The sovereign power being *parens patriae* and *ipso facto* possessing higher powers than those of its subjects, must resort to the painful necessity of enforcing its will, though at first through *inertia* the people may resent it in their heart of hearts. All innovation excites odium at first, but an essentially good piece of legislation must per force appeal to the good sense of the subject and confer immense boon upon the people. This piece of legislation is fraught

with possibilities of immense good in future. It is desirable that the necessity for State interference may never arise under this law but existence of a piece of legislation may work as a scarecrow to the erring trustees. Travancore set a good example ; it is for others to follow. It is known to all that Travancore is a model State. The Travancore State ought to be congratulated on its having such able officers Mr. Thanu Pillay, the late talented Chief Secretary, Mr. Kunhi Ramar Nayar, High Court Judge and last though not least Mr. V. Nagam Aiya. He had a regular up-hill-work of fighting down powerful opposition to the measure which enacted that Government may, subject to the limitations provided in the section, *assume* management of Endowments where the trustees or donors request Government to do so ; where the trustees refuse to continue in the trusteeship or declare themselves incapable to manage the Endowments, or where Government have the right to take part in the management by the appointment of certain officers or servants or where Government have succeeded to the right of management in part by reason of escheat of trustees. In all other cases, Government should have the power to exercise such a *superintendence* in the management of institutions as to best fulfil the objects of the trust. In the case of Hindu Charitable Endowments, it is often difficult to distinguish those that are partly religious from those that are purely secular. Such Charitable Endowments as are *purely secular* should be taken out of the operation of this Bill ; all other Charitable endowments which have a religious basis or connection are intended to cover by the Bill. Only Charities of a purely secular nature wholly unconnected with any religious observance are meant to be excluded from the operation of the Bill. All such have been provided for in a separate Bill on the lines of the British Indian Act VI of 1890 along with the charities founded by other religionists, without reference to the creed of the donors or beneficiaries of the Endowments. Act VI of 1890 includes Charitable Endowments which are also *partly* religious, but does not include a purpose which relates exclusively to religious teaching or worship. The latter Bill does not confer on the Travancore Government the same liberty to deal with Christian and Mahomedan Charities ; for this Bill wholly eschews from its scope all charities which have be least religious connection with them.

The Bills are not at all aggressive in their character and there is no cause for apprehension that this is "the thin end of the wedge" but the State will not act on its own initiative save and except on an application for that purpose.

The Journalist and Newspaper Proprietor—edited by A. Aron Watson, J. P. F. J. I.—No. 9 vol. XIX. October 1903—Printed and published by the Century Printing Company, Limited, 19 and 20, Fetter Lane, London, E. C.

The October number of the periodical contains besides news, paras and short notes on social and current topics of the day, a few short articles. "Anonymous Journalism" by Mrs A. S. Ballin is very interesting. The illustrations are also good. It is one of the cheapest periodicals of the day.

The Indian Education Policy—being a Resolution issued by the Governor-General in Council on the 11th March 1904—Printed at the Government of India Central Printing Office, 8 Hastings Street.

This nicely printed and richly bound volume of 51 pages besides giving a vivid history of the progress of education in India under the British Rule records the opinion of the Government of India on the merits and demerits of the present system of education in vogue in this country. The Governor-General in council has been pleased to review the whole subject thoroughly in its various aspects with a view to "point out the defects that require correction in each of its branches and to indicate the remedies which in the opinion of the Government of India, ought now to be applied. The following points amongst others have been discussed :—

- (1) Education and Government service.
- (2) The abuse of Examinations.
- (3) Government Control and private enterprise.
- (4) Primary Education.
- (5) Ethics of Education.
- (6) Female, Technical and University Education.

The Government of India have undertaken the great task of education in the hope that they will have the hearty support of the

leaders of native thought and of the great body of workers in the field of Indian Education. On them the Governor-General in council relies to carry on and complete a task which the Government can do no more than begin." We have full sympathy with the Government of India in most of the views expressed in the book concerning the student, but we are sorry, we have very little confidence in some of the "remedies" for the existing evils, suggested in the book, unless, of course, they are very judiciously administered under strict and careful supervision of well-trained experts.

Indian Art at Delhi, 1903—by Sir George Watt, K.T., C.I.E., M.B., C.M., Etc., Director—The Illustrative part by Percy Brown, A.R.C.A., Assistant Director—published by the Superintendent of Government Printing, India.

The book is indeed a valuable work of art. It is nicely printed and very handsomely bound in cloth embroidered with gold. The get-up and the finish is excellent. The beautifully executed illustrations reflect great credit on Messrs. Wiele and Klein of Madras who prepared and printed them. "This work was originally intended as a catalogue of the Delhi Art Exhibition.

"As, however, it contains information of permanent value regarding Indian arts and industries, the Government of India have decided to publish it, believing it supplies a distinct want." We fully concur with the Government of India in this view. The book is, indeed, invaluable. At the last Delhi Art Exhibition, special efforts were made by the authorities to exclude all trace of the modern foreign influences which have tended to debase the ancient indigenous arts of India. The things were arranged according to their kind and not to their place of origin for the convenience of visitors who could thus compare at a glance. The exhibition buildings contained several rooms and balconies, windows specially designed to exemplify various modes of architecture in vogue in India and Burma. The Madras room door is an exceedingly fine example of the Swami Style (the accumulative and realistic Dravidian style of South India). The Bombay room, which has been designed to exemplify the elaborate and intricate Jaina style of architecture and ornamentation that still survives in the Jaina

temple of the province, obtained the gold medal as the best example of Indian art furnishing. The Jodhpur Jharoka, the Burma room, the Baroda Balcony, Travancore House, Ahmedabad House, &c. presented also excellent specimens of stone and wood engraving. The author has given a full description of all the articles exhibited together with the history of the growth or fall of their manufacture. He has attempted to trace the origin of almost every kind of industry of India with a view to give a comprehensive history of Indian arts, crafts, (ancient and modern). The probable causes for the rise or fall of several of them have been very carefully given with judicious suggestions for their improvement. We presume the following extract from the remarks on Pottery will not be uninteresting, as an example of the way in which the minutest information has been gathered to show how social and religious customs of a people retard severely the progress of art.

"There are three widely different classes of pottery—(a) that produced by aboriginal tribes (b) by Hindus (c) by Muhammadans. According to Hindu observance pottery is easily defiled and has to be broken whenever polluted, since it cannot be cleansed in the same way as brass. So again pottery has to be thrown away on certain prescribed occasions, whether polluted or not. Thus has come into existence an immense traffic with the Hindus in cheap rubbish, but no demand whatever for higher class pottery. The artistic skill of Hindu potter or *Kumhar* has in consequence been developed in the manufacture of jars in which to store grain, spices, pickles, rather than in the production of eating or drinking vessels. Where not intended for use with water, glassing would be almost unnecessary and very possibly the prevalence of painted or lacquered in place of glazed pottery, in the hands of the Hindus, is due to this circumstance." The book is replete with information of various kinds which testifies to the great skill and ingenuity of the author in placing before the public the results of his laborious research and careful investigation in the region of Indian Arts and Industries. Commenting on the habits of Indian craftsmen, the author says (and no doubt there is some truth in what he says)—"the artizans are profligate, apathetic, indigent and of intemperate habits. If their work be not desired they are ready to starve; but to change

their social position, their modes of life or their craft customs, they will not. The number of good artists is extremely limited and a rule is carefully observed, *vis.* that if a youth does not show some natural aptitude, no attempt is made to train him to the higher flights of the carver's (or of any other) art. Accordingly a large percentage of the sons of carvers become carpenters or even agriculturists and do not learn their ancestral trade. These considerations thus naturally narrow the possibility of any great expansion, the more so since no person outside the caste is ever admitted to the fraternity. The cheap, ordinary goods, that can be produced by indifferent skill, are those that pay. It accordingly amounts to a favour to undertake the more expensive and more troublesome work. Under these circumstances it is useless to expect the possible new markets and high prices that might be secured for good and conscientious work." The author has not only done a service to the Indian people but has also helped the cause of scientific research by placing within reach of the enlightened scholars of Europe and America who may be said to have been groping in the dark, fragments of prehistoric pottery, &c., &c., while the prototypes of many of the most instructive forms and designs they are dealing with, are still produced by the village craftsmen of India and might be studied with great advantage! The masterly style in which the book is written has made it very interesting to the general reader. A perusal will show that it is instructive, amusing and is a storehouse of information. One great advantage of the book is that it is devoid of unexplained technicalities ordinarily met with in books of this kind to the great inconvenience of the general readers. Through want of space, we are sorry we are unable to notice more fully the many important features of this valuable work. The author's suggestions for the improvement of dyeing, painting and silk manufacture, &c. &c. &c., are very valuable and will lead to good results if acted upon. Sir George Watt cannot be too highly complemented on the production of this invaluable record of his arduous labours in connection with the improvement, restoration and reformation of Indian Arts and industries. We are glad to find that the Indian aristocracy and gentry joined the Government of India in their laudable attempt of encouraging and popularizing Indian arts and industries by giving prizes, money grants, &c. &c. &c., to the

exhibitors. The Indian children and Maharajas have also tried their best to make the exhibition a success by supplying every aid required of them.

Gita and Gospel—by Neil Alexander, published by Messrs. Thacker Spink & Co., Calcutta.

Gita and Gospel is the title of a booklet written by Neil Alexander, (a scholarly missionary presumably) and is nothing less than an attempt to prove that the Gita which embodies the highest ethical teachings of the Hindu religion and marks the culminating point of Hindu thought, is instead of being a transcript from sober history, the product of the airy imagination of a poet or a "poet philosopher" (as Mr. Alexander puts it,) having no substratum on fact.

The author, indeed, acknowledges that a Kshatriya prince called Krishna lived in the Post-Vedic period and took part in the battle of Kurushketra but he desires entirely the historicity of the situation of the Gita. He claims that it is a comparatively recent work—"the last member of a long series, the final product of a clearly defined and elaborate process of development." He has nothing to say, however, against the ethical teachings of the Gita, indeed, in more than one place, he confesses his great admiration for "the loveliest flower in the garden of Sanskrit literature."

Now, his reasons for concluding that the Gita is a late work having no connection with Krishna who consequently could never have claimed to be an incarnate God on the field of Kurushketra may be summed up in a sentence.

All scholars (at least the majority of them) agree that the battle of Kurushketra was fought in the same period in which the Vedas were compiled, while the Gita both in its teaching and diction, belongs to a much later age—the age of the Mahabharata and Manu.

Mr. Alexander, however, does not rest content with a trip to the shadowy regions of ancient India only. Travelling is so easy in these days of electric railways and motor cars, portable hand-books and neatly got-up synopses. He visits successively Ancient Greece, Babylonia, and Ancient Rome. He meditates upon the picture of the just man tortured to death as drawn by Plato in his

Republic in the first place, offers his heart-felt homage to the picture of the Servant of Jehovah atoning for the sins of the unrighteous by a shameful death as drawn in the fourth poem of the Hebrew prophet in the second place, and studies Virgil's short pastoral poem *Pollio*, in which the poet expresses his hope of the dawn of a new era of justice and peace, to be ushered in with the birth of a boy who "shall receive the life of the Gods"—in the third.

"How is all this to be explained?" says the author. "Wide chasms sever the Hindu sages, the Greek philosopher, the Hebrew prophet and the Roman poet." Yet they have separately formed ideals of a perfect and Blameless Character which (in his opinion) are reconciled in Jesus alone "in a loftier unity."

We cannot help regretting that the author sees nothing in the *Gita* except purely literary merits.

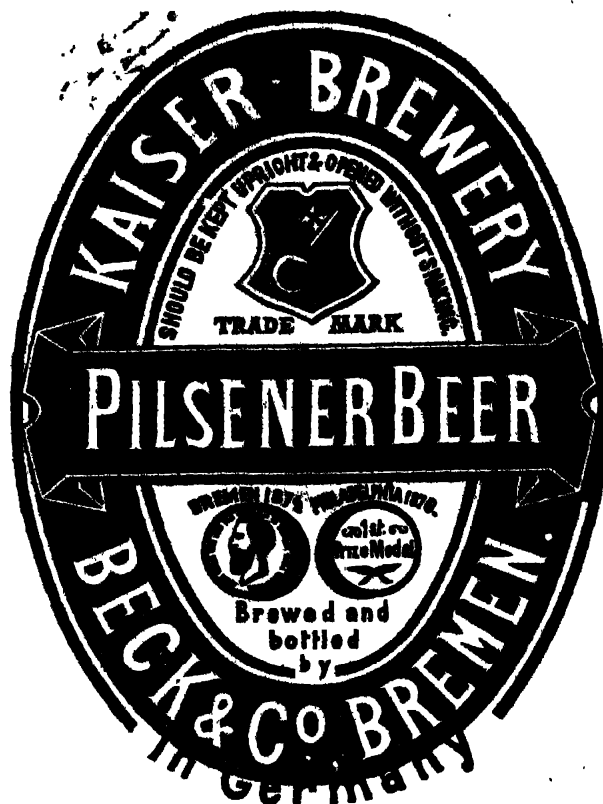
The overwhelming mass of the so-called evidence that he brings forward to prove his theory is not only insufficient but erroneous, and founded on a wrong conception of Hindu ideas. We shall take the earliest opportunity of showing him his errors arising out of misconception, want of correct information, and a strong bias towards his own creed, &c. It is, indeed, a very clever attempt at spreading the Christian faith under the plea of a scholarly discussion. The author's argument based on the variation of the number of slokas in the *Mahabharat* is inaccurate. There are very many inaccuracies which we shall try to point out when we shall have occasion to refer to them. It must be borne in mind by all critics that religious books of old of any creed may be deemed unfit to stand the test of the so-called historical analysis according to the modern critical method.

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THE
NATIONAL MAGAZINE.

NEW SERIES.

NO. 7.—JULY, 1904.

A BURIED CITY.

We are apt to regard the rapid growth of great centres of population as peculiarly characteristic of our times; to point with pride to Chicago and Melbourne won from forest and swamp within the space of a single human life. Such complacency receives a severe shock when we light upon monuments of a vanished civilization which seem the more amazing because they were painfully reared at a period of anarchy, and in the teeth of obstacles unknown to modern pioneers of industry. Many are the lessons taught by Ypres, the oldest, and in many respects the most remarkable of Flemish cities.

Its annals date back to the second half of the tenth century, when an island on the river Yperlee became the refuge of a colony of weavers, harassed by the tyranny of feudal nobles. Its centre was a fortalice erected by a powerful Count of Flanders. Under the protection afforded by this chieftain and his successors the group of wooden huts developed into a city which was known and respected throughout Europe. Ypres was the commercial capital of Flanders while Bruges and Ghent were mere townlets. In 1247, it numbered 200,000 inhabitants: and its streets resounded the hum of 4,000 looms. The burghers wielded powers of life and death: they coined money, had a highly organised militia, and treated with foreign potentates on equal terms. Special privileges were vouchsafed to the merchants of Ypres by our Plantagenet Kings. It is difficult to imagine a time when England's mineral wealth was hardly touched; and her mainstay was the fleece from innumerable flocks which

fed in her bush pastures. Such was our ancestors' plight in the 13th century; when the Flemish colony in London monopolised foreign trade, bartering British wool for the wines of France, Italy and Spain, and for the countless wares which Englishmen were unable to manufacture for themselves. The connection is traceable in the word "diaper," which is a corruption of "d'Ypres."

But this abounding prosperity declined as rapidly as it had reached its zenith. Local history after the middle of the 14th century epitomises that of Europe: for a struggle set in between feudal might and burgher stubbornness in which our civil liberties were slowly evolved. The growing wealth of Ypres excited jealousy in its erstwhile protectors, the Counts of Flanders; and the citizens joined their brethren of Ghent and Bruges in withstanding mail-clad oppression: moreover, its situation, within a few miles of the frontier, laid it open to attacks by the Kings of France, who were persistent foes to Flemish national spirit. Then the devoted city was drawn into the warfare provoked by the claims of our Plantagenet line to the throne of France. In 1383 Ypres was besieged by an English army, which met with a crushing defeat under its walls. But victory too often spells disaster. Nothing is more sensitive than commerce. The far-stretching suburbs were destroyed during the siege. Foreign merchants deserted a centre which was given over to the demons of invasion and civil discord; and the weavers migrated wholesale to England. At the close of this war-racked century the population had sunk to 100,000. Then came the storms of the Reformation. In 1566 and 1578 Ypres was sacked by bands of ICONOCLASTS, who emulated the followers of John Knox in working havoc with carved work and painted glass. Yet another wave of destruction swept over Ypres when it was made a stronghold by the States of the Low Countries during their death struggle with Spain. In 1584 it was stormed by one of the infamous Duke of Alva's lieutenants, after a rigorous blockade of eight months. He left it a heap of smouldering ruins, inhabited by a remnant of 5,000 citizens. Time the healer brought small relief to their misery. The history of Ypres during the seventeenth and eighteenth centuries is one of recurring sieges by Frenchmen, Spaniards and Austrians. In 1793 the Municipal Government, which had weathered so many storms, was swept away by the Convention. Under Napoleon, the bishopric was abolished, and the

fortifications were dismantled by the Belgians, to whom Flanders was allotted in 1815. But the ancient city wears "sorrow's crown of sorrow" with a dignity and tender grace which command our admiration. Its monuments of a glorious past are still erect to point the Horatian moral, *Vixere fortes ante Agamemnona*—the germs of civilisation were planted by forgotten heroes whose works were inspired by a sense of public duty and an enlightened regard for the interests of posterity.

Chief amongst them is the world-famous Cloth Hall, which is, perhaps, the most imposing secular edifice in Europe, and has served as a model for civic architecture in our own day. This amazing structure dates from the 13th century, when the wealth of Ypres attained its zenith; for the foundation stone was laid in 1200, and the final touches were given in 1304. Every detail is governed by the canons of that stern and lofty Gothic which we style early English, or First Pointed; and belongs to the wondrous era which produced Salisbury Cathedral, and the earlier portions of Westminster Abbey. The architect's name has not come down to us; but he must have been a pillar of the Masonic Craft, which wrought such miracles in wood and stone while the population at large was but poorly housed. The central feature is the Belfry, a cherished symbol of burgher independence, and a rallying-point for defence against foreign enemies and feudal aggression. It is a square structure, 230 feet in height, topped by a graceful spire, which displays the City's crest—a golden Dragon. The spire is flanked by four octagonal tourelles, as is the high pitched roof, which stretches on either side. The ground-floor, 435 feet long, has 44 rectangular doors, each surmounted by a Gothic window. The second storey is adorned with a line of ogival openings, bisected by slender columns, which serve alternately as windows and niches for twin statues of Counts and Countesses of Flanders. The latter were originally in polychrome, but they were destroyed by the revolutionary troops in 1793, as symbols of tyranny. Their places have been filled by modern stone images of varying merit.

The cloth trade of Ypres, which once filled this gigantic building with the busy hum of commerce, has long since passed away and the ground floor now serves the baser uses of a market for butter and vegetables. In the northern wing is a series of halls showing the ancient timber flooring of the upper storey, supported by

massive cylindrical columns. The other ground-floor chambers have a vaulted roof of brickwork, resting on stone pillars. At the eastern front is an excrescence which contrasts strangely with the stern Gothic of the Cloth Hall proper. This is known as the "New Work," and was added in 1624 in a flamboyant Spanish Renaissance style. On its ground plan are ten arcades resembling those of the quadrangle which St. John's College, Oxford, owes to Inigo Jones. The second floor is packed with rectangular windows: and from its centre stands out the exquisite gable of the Municipal Chapel with painted glass windows. The quaint beauty of this new work secures a pardon for the anachronism involved by its architecture.

A less satisfactory annexe is found at the north-eastern corner. Here originally stood the Town Hall, harmonizing with the main building in every architectural detail. It was built in hot haste after a conflagration in 1498: and is now a mere patchwork of discordant styles, which cries aloud for reconstruction. Traversing a suite of rooms in this nondescript edifice, we pass into the Cloth Hall, which fills the second floor; and stand amazed at its proportions. On either side stretches an interminable vista: and looking upward, the eye ranges over a forest of oaken beams supported on either side by projecting buttresses more massive if less ornate than those of Westminster Hall. At each angle the superstructure rests on a stupendous column of timber. Its raw material was towed to Flanders in rafts from the primæval forests of Northern Europe which have long ago been replaced by a puny growth. The axe-marks are as fresh as when these giant beams were placed in position 700 years back: and their condition is a standing proof that timber, protected from the weather, is as durable as granite.

In 1861 the Municipal Council resolved to decorate the walls with paintings commemorating the chief events in the city's chequered annals. This happy inspiration has produced a series of pictures which are worthy of their grandiose setting. M. Ferdinand Pauwels, a townsman who now directs the Royal Academy of Dresden, is responsible for the artistic work in the Eastern wing. In studying this wonderful panorama of mediæval life, we gain an insight into its blended squalor and magnificence: we can understand something of the fierce passions which burned in our ancestors' hearts: and are able to follow the slow growth of public spirit amid surroundings appalling in their sternness and savagery. M. Delbeke

was entrusted with the mural paintings west of the Belfry. His aim was to reproduce the civic and social existence of Ypres in all its phases. The task was probably beyond human powers. It was interrupted by the artist's early death, and his unfinished pictures preach a sermon in colour on the vanity of human wishes.

A door on Pauwels' Hall, as it is now styled, leads to the "Chamber of the Echevins," which may be Englished as the Aldermans' Court-room, where the City Fathers received envoys from foreign princes and pronounced doom on many a trembling knave. This sumptuous apartment was gutted during the French Revolution. Its furniture and tapastry were sold, and all emblems of servitude were covered with a thick coating of whitewash. Fifty years later, a restoration was attempted; and the removal of the plaister disclosed a series of mural portraits of counts and countesses of Flanders during the 14th and 15th centuries. This frieze is in brilliant preservation, and is, perhaps, the most interesting specimen extant of mediæval art. The other measures taken to restore the "Chamber of Echevins" are in excellent taste. Its monumental mantelpiece would have won the burghers' approval in the city's palmy days; a great window displays the arms of the twenty-seven guilds, and the walls are adorned with good historical paintings. We learn from these that many social problems which vex the soul of the present generation were solved at Ypres centuries ago. In 1253 a system of free secular education was founded by the Municipality: and in 1515 they organised poor relief—twenty years before a half-hearted attempt in that direction was made by Henry VIII of England.

Behind the Cloth Hall rises the massive tower of a Cathedral dedicated to St. Martin, affording a glorious panorama from its summit of Flanders' fertile plains. The choir, which dates from 1221, is the oldest portion of the structure. It has no ambulatory, but its lofty roof and the light arcades of the Romanesque Triforium have a severe beauty of their own. The transepts were begun a generation later; and resemble the Cloth Hall in the rigid Gothic of their minutest details. One's first impressions of the Cathedral are of height, admirable proportions, and a successful blending of architectural styles. Though it is but 320 feet in length, the vista is most imposing, and is marred only by a rococo pulpit of carved wood, and an incrustation of variegated marble which disguises the stern beauty of choir and altar. Facing the latter there once stood

a magnificent mausoleum of Robert Bethune, Count of Flanders, who died at Ypres in 1322: but it was utterly destroyed by the Iconoclasts. Very similar prejudices have prevented the erection of a memorial to one of Ypres' greatest citizens. A simple marble plaque, let into the flooring of the choir, marks the resting-place of Cornelius Jansenius, seventh Bishop of Ypres, who was carried off by plague in 1638. This prelate raised a mighty commotion in Christendom by the publication of an analysis of St. Augustine's works, in which he repudiated the Catholic doctrine of Free will, and identified the all-powerful order of Jesuits with the Semi-Pelagians who were vigorously attacked by the most illustrious of our later Fathers of the Church. These subversive tenets brought down on their originator the thunders of Rome; and his disciples suffered cruel persecution under Louis XIV of France, who fell into Jesuit toils in his latter years, and much preferred infidels to Jansenists. Driven from French territory, the sect took root in Holland, where a remnant survives who style themselves "Old Romans." St. Martin's Cathedral is still the most splendid of Flemish fanes; but it stands in need of judicious restoration. A hideous excrescence in jaundiced brick should be swept away, and the same fate ought to attend a deserted convent, which masks beautiful Gothic cloisters.

Returning from the Cathedral to the *Grand' Place*, or central square, by a vaulted passage, and passing a group of sixteenth-century façades which attract a swarm of artists, we reach the Butchers' Hall. Its ground-floor, which is still a meat-market, is coeval with the Cloth Hall, and shows the same line of rectangular doorways surmounted by original windows. The two upper storeys are a later addition in the Flamboyant style; and now contain the Municipal Museum. Unlike the asylums of boredom which are to be found in English provincial Town, the Ypres Museum teems with interest, albeit that the collection is overcrowded and ill-arranged. Among the paintings are authentic examples of Rubens, Titian, and the ancient French School; and one is shown the very glaive which decapitated the illustrious Counts Egmont and Horn. But the visitor's attention is engrossed by a splendid series of water-colour drawings, illustrating domestic architecture in the Middle Ages, by an Ypres artist named Augustus Böhm. The city's streets like those of London before the Great Fire of 1666, were lined with houses

presenting timber fronts adorned with wood carving, quaint gables, and leaded windows galore. Alas, they have succumbed to the Vandalism which has robbed old Europe of so many precious vestiges of the past. It is a curious fact that modern Iconoclasm exhibits three well-defined phases. The first set in about 1793; when, fired by the demon of discord let loose in Paris, our citizens took a savage delight in obliterating all traces of antiquity. The second era was the decade 1820-30, when a spirit of reform was abroad; and the last was those fatal "sixties," when artistic feeling was at its nadir. In 1823 the Philistine Town Council of Ypres offered premiums to citizens who should rebuild their wooden houses; and an ordinance is still in force which precludes repairs to those which survive. Danger of fire served as an excuse for their atrocious edicts, which ignore the fact that the sequence of social life and history should be jealously respected. How irreparable is the loss to art may be faintly conceived by a study of Böhm's 'exquisite designs,' which stirred the enthusiasm of Victor Hugo. But though much has prematurely gone the way of all flesh and all works of man, enough remains to delight the painter's and antiquarian's eye. Southward of the Cathedral is a square named after an Ypres statesman of the last generation, the Place VANDEPEEREBOOM. It was of old time a dock, admitting vessels from the Yperlee; which was long ago filled up and planted with trees. A few old timber houses, with overhanging fronts are to be seen behind the modern dwelling places which line the square. One of the oldest timber façades is preserved in the Cloth Hall; and another, still inhabited, breaks the monotony of nineteenth-century shops near the gate of Lille.

In exploring the grass-grown streets, one lights at every turn on buildings of a later age, but equally replete with the aroma of a vanished life, chief amongst them is the Hotel Merghe-lynck, constructed at the beginning of the Louis Seize period by a wealthy family whose name it bears. Their present chief, M. A. Merghelynck has converted his ancestral home into a museum illustrating an era which carried the arts and the graces of social existence to a pitch unrivalled at any epoch in the world-history. From cellar to garret the hotel Melghelynck teems with treasures evolved by that matchless ingenuity and artistic instinct which suffered so grievous an eclipse at the Revolution. The realism is almost as startling as that

of Pompeii. We are allowed to penetrate the bed-chamber of an eighteenth-century seigneur, furnished precisely as if the master were still in life. His sword and peruke await him near the alcove; his clothes hang in contemporary wardrobes; the table displays books, newspapers, spectacles, and writing materials of the day. M. Merghelynck also owes a sumptuous sixteenth-century castle at Beauvoir, within easy reach of Ypres, which he has restored and furnished in consummate taste, and with strict regard to the ideals of the Renaissance. He deserves the highest praise for public spirit which prompts him to place these treasures at the disposal of students.

Until 1886 the city was surrounded with massive ramparts, remodelled under Vauban's eye. In that year, however, a long stretch in the northern and western suburbs was destroyed, in order to give room for extension towards the railway-station. But Ypres lives on the past. Its trade is restricted to butter and farm produce, and is naturally inelastic. The hope of those Vandals who destroyed the seventeenth century ramparts has not been realised; and the mischief brought by them is without compensation. The remaining fortifications have been converted into a promenade, washed by the placid Yperlee, and affording an ever-varying panorama of spires and towers, picturesque gable and tile-clad roofs. Ypres is but a couple of hours' rail from ultra-modern Ostend; but it lies outside the beaten track which leads tourists to Bruges, Ghent and Brussels. Thus its manifold beauties are but little known in England. And yet the group of public buildings which grace this little Belgian city teach the same lesson as the stones of Venice, the Acropolis and Forum. "Classical study," wrote Herman Merivale, "made men pedants after a fashion two centuries ago. At present its effect is to preserve us from an equally offensive and less harmless pedantry. By disclosing to our view that magnificent phantasma of great communities entombed and great conceptions buried with them, it weakens the too-prevalent temptation to over-value ourselves and our age."

F. H. SKRINE.

THE VEDIC RELIGION.

X.

বিখ্যামিত্র ঋষিঃ । অগ্নিদেবতা । ত্রিষ্টুপ্চ্ছন্দঃ । ৩।৫
 প্রত্যগ্নিকৃষসশ্চেকিতানোহবোধি বিপ্রঃ পদবীঃ কবীনাম্ ।
 পৃথুপাজা দেবরক্তিঃ সমিকোহপ দ্বারা তমসো বহ্নিরাবঃ ॥১
 প্রেদ্বগ্নির্বাবুধে স্তোমেভিগীতিঃ স্তোতৃণাং নমস্ত উক্ঠৈঃ ।
 পূবীকৃতস্ত সংদৃশশ্চকানঃ সং দূতো অতোদুৰ্বসো বিরোকে ॥২
 অধাযাগ্নিমার্জুষীষু বিক্ষপাংনর্ভো মিত্র ঋতেন সাধন ।
 আ হর্যতো যজতঃ সাবস্থাদভূত্ব বিপ্রো হব্যো মতীনাম্ ॥৩
 মিত্রো অগ্নির্ভবতি যৎসমিকো মিত্রো হোতা বরুণো জাতবেদাঃ ।
 মিত্রো অধ্বযুরিষিরো দমূনা মিত্রঃ সিকুনামুত পবর্তানাম ॥৪
 পাতি প্রিয়ং রিপো অগ্রং পদং বেঃ পাতি যজ্ঞশ্চরণং সূর্যস্ত ।
 পাতি নাতা সপ্তশীর্ষাণমগ্নিঃ পাতি দেবানামুপমাদমৃষঃ ॥৫
 ঋভুশ্চক্র জিড্যাং চাক্রনাম বিদ্বানি দেবো বয়ুনানি বিদ্বান্ ।
 সসস্ত চর্ম যুতবৎপদং বেস্তুদিদগ্নী রক্ষত্যপ্রযুচ্ছন ॥৬
 আ যোনিমগ্নিযুতবস্তমস্থাপৃথুপ্রগাণমুশস্তমুশানঃ ।
 দীত্বানঃ শুচিঋষঃ পাবকঃ পুনঃ পুনর্মাতরা নবাসী কঃ ॥৭
 সন্তো জাত ওষধীভিবর্বক্ষে যদি বর্ধন্তি প্রন্থো যুতেন ।
 আপ ইব প্রবতা শুস্তমানা উরুযাদগ্নিঃ পিত্রোরুপস্থে ॥৮
 উহ ঈতঃ সমিধা যহ্নো অতোদুৰ্বসো অধি নাতা পৃথিব্যাঃ ।
 মিত্রো অগ্নিরীড্যো মাতরিখা দূতো বক্ষদাজ্জথায় দেবান্ ॥৯
 উদন্তভীঃসমিধা নাকমৃষোহগ্নির্ভবনুত্তমো রোচনানান্ ।
 যদী ভৃগুভ্যাঃ পরি মাতরিখা শুভা সজ্জং হব্যবাহং সমীধে ॥১০
 ঈলামগ্নে পুরুদংসং সনিং গো শশ্বতমং হবমানায় সূধে ।
 স্তান্নঃ সূহুস্তনয়ো বিজবাগ্নে সা তে স্মতিভূত্বশ্চ ॥১১

AGNI-RISHI BISVAMITRA-METRE TRISTUP.

III. 5.

AGNI, the sage, the knower of the ranks of poets, has awoke on the approach of the Dawns. With far-spreading rays, kindled by the god-loving, the carrier has opened the two doors of darkness. 1.

The adorable one is growing by the hymns, words and songs of his worshippers. Delighted with the many bright things of the sacrifice the Messenger is shining in the first flush of the dawn. 2.

Friend Agni, the child of waters, who performs the sacrifice in the right way, has been established in the houses of men. The dear adorable one has ascended the raised altar. The wise one is worthy to be invoked by the sages. 3.

Friend Agni when kindled becomes Mitra, the Hota; then Varuna, the Jataveda. The friend next becomes Vayu, the sacrificer. He is the friend of rivers and mountains. 4.

Agni protects the dear first place (=altar) of this wide world. The great Agni protects the path of the Sun. Agni protects the navel of the seven headed (Sacrifice). The beautiful Agni protects that which exhilarates the gods. 5.

The great god Agni knowing every thing worthy to be known has created an adorable beautiful name for himself. His wide extending slumbering body shines like ghrita. He is protecting with care that first place of the earth. 6.

Agni has come longing to the wide womb (=vedi) full of ghrita that longs for him. The resplendent, bright, beautiful and purifying Agni is making his parents (heaven and earth) anew over and over again. 7.

When the newly born Agni is carried by the herbs then those sprouting grass blades looking beautiful like strong currents of water nourishes Agni by ghrita. Agni grows in the lap of his parents, 8.

Agni adored by us and grown great by being kindled, is shining in the navel of the earth illuminating the sky. Agni was adored as Mitra (=Sun) Matarisva as a messenger brought him down for worshipping the gods. 9.

When Matarisva for the Bhrigas kindled the carrier of *havis* who was lurking in the cave then the beautiful Agni being the best of all shining things astounded the highest heaven by his effulgence. 10.

O Agni make for your worshippers this earth full of the gift of cows—gift that abounds in mighty deeds and is most lasting. May our sons and grandsons be prolific. O Agni, let your well known grace be on us. 11.

বামদেব ঋষিঃ। বৈশ্বানরোমিদেবতা। জিহ্বপ্চ্ছন্দঃ। ১১।

বৈশ্বানরায় মীচহবে সজোষাঃ কথা দাপেমাম্ময়ে বৃহতাঃ।

অনুনে বৃহতা বকথেনোপ ত্তারহপমিঃ যোধঃ ১১

মা নিন্দত য ইমাং মহং রাতিং দেবোদদৌ মর্ত্যায় স্বধাবান্ ।
 পাকায় গৃংসো*অমৃতো বিচেতা বৈখানরো নৃতমো যহো অগ্নিঃ ॥২
 সাম দ্বিবর্হা মহি তিগ্ধভৃষ্টিঃ সহস্ররেতা বৃষভস্তবিন্মান্ ।
 পদং ন গোরপগৃঢ়ং বিবিধানগ্নিমর্হং প্রেছ বোচন্ননীষাম্ ॥৩
 প্রেতা অগ্নিবর্ত্তযন্তিন্মজস্তপিষ্টেন শোচিষা যঃ সুরাধাঃ ।
 প্রা যে মিনন্তি বরুণস্ত ধাম প্রিয়া মিত্রস্ত চেততো ঋবাণি ॥৪
 অত্রাতরো ন যোষণো ব্যস্ত পতিরিপো ন জনয়ো ছরেবাঃ ।
 পাপাসঃ সন্তো অনুতা অসত্যা ইদং পদমজনতা গভীরং ॥৫
 ইদং মে অগ্নে কিম্ভে পাবকামিনতে গুরং তারং ন মন্য ।
 বৃহদধাধ ধৃষতী গভীরং বহুং পৃষ্টং প্রযথা সপ্তধাতু ॥৬
 অমিন্বেব সমনা সমানমন্তি ক্রতা পুনতী ধীতিরশ্রাঃ ।
 সসস্ত চমর্গধি চাক্র পৃথ্বেরগ্রে রূপ আকুপিতং জবারু ॥৭
 প্রবাচ্যং বচসঃ কিং মে অস্ত গুহা হিতমুপ নিগিষদন্তি ।
 যজুশ্রিয়ানামপ বারিব ব্রনৃপাতি প্রিয়ংরূপো অগ্রং পদং বেঃ ॥৮
 ইদমু ত্যামহি মহামনীকং*যজুশ্রিয়া সচত পূর্বং গোঃ ।
 ঋতস্ত পদে অধি দীতানং গুহা রঘুষ্যজঘুষ্যাবিবেদ ॥৯
 অধ ত্রাতানঃ পিত্রোঃ সচাসামহুত গুহং চাক্র পৃথ্বেঃ ।
 মাতুপদে পরমে অস্তি যদগোবৃষঃ শোচিষঃ প্রবতস্ত জিহ্বা ॥১০
 ঋতং বোচে নমসা পৃচ্ছ্যমানস্তবানসা জাতবেদো যদীদম্ ।
 তমস্ত কল্পসি বহু বিধং দিবি যজু জবিণং বৎপৃথিব্যাম্ ॥১১
 কিং নো অস্ত জবিণং ককু রত্নং বি নো বোচো জাতবেদশ্চিকিৎসান্ ।
 গুহাধ্বনঃ পরমং যনো অস্ত রেকু পদং ন নিদনো অগন্য ॥১২
 কা মর্ষাদা বয়ুনা কঙ্কবামচ্ছা গ্নমেম বযবো ন বাজং ।
 কদা দেবীরমৃতস্ত পত্নীঃ সুরো বর্ণেন ততনরুযাসঃ ॥১৩
 অনিরেণ বচসা কল্পে ন প্রতীত্যেন কধুনাতৃপাসঃ ॥১৪
 অধা তে অগ্নে কিমিহা বদন্তানায়ুধাস আসতা সচন্তাম্ ॥১৫
 অস্ত শ্রিয়ে সমিধানস্ত বৃষে বসোরণীকং দম আকুরোচ ।
 রুশধসানঃ সূদৃশীকরূপঃ ক্রিতির্ন রায় পুরুবারো অজ্যোৎ ॥১৬

RISHI BAMADEVA. BAISVANARA AGNI. METRE TRISTUP.

IV. 5.

How shall we being united offer to Agni Baisvanara the bounteous one, a mighty shining hymn. He with his undefective great body is supporting the sky as a pillar supports a roof. 1.

Do not blame him who though a self-dependent god, has given me, a mortal this wealth. The wise, immortal, all knowing, the best of leaders, mighty Baisvanara Agni has given to a simpleton, 2.

The mighty god in both worlds, armed with sharp weapons, the mighty bull with thousand seeds, the all knowing Agni has told me a great *Sama*, a prayer like the lost footstep of a cow. 3.

The sharp-toothed Agni who has beautiful wealth consumes with his hottest flames those who violate the dear eternal laws of Varana and of Mitra who sees every thing. 4.

Those who go astray like brotherless young women or who misbehave like husband-hating wives—sinful, false and untruthful men have created this deep abyss. 5.

On me who though a stripling, has not violated the laws, O Agni the purifier has given this great, deep and mighty seven-fold hymn like a heavy load on the back with confident pleasure. 6.

To him alone all pure hymns united together go to a common centre by their good work. On the skin of the sleeping Agni is first placed the beautiful shining form of *Prisni*. 7.

What is required to be said of this saying of mine? They say it is hidden in the cave that which is brought out of the milch cows like water. He protects the dear form, the best place in the world. 8.

This is the greatest of the great splendours that of old the milch cow nourished. I have known the shining swift moving one hidden in the place of the water. 9.

Then shining between the parents (*i.e.*, heaven and earth) with his tongue he knew the beautiful secret honey of *Prisni*. Lying near, in the highest place of the mother cow, the tongue of the resplendent swift moving manly one (knew the secret honey of *Prisni*). 10.

Being asked with salutation I speak the truth when you have blessed me with this, O *Jataveda*. You hold sovereignty over all wealth, that is in heaven, that is on earth. 11.

Which of this treasure is ours tell us, O all-knowing *Jataveda*. Tell us the highest hidden place of this path which is for us. We have not come to an empty place like your revilers. 12.

What is the limit, what the objects? We will go towards the coveted wealth like racers. When will the goddesses, mistresses of

immortality, the Dawns prolong (our lives) with the rays of the sun? 13.

What, O Agni, are these discontented men chattering here with their weak, useless, whispering slanderous speech? May they unarmed meet fall into utter ruin. 14.

The face of Agni kindled by fuel—he who is the lord of wealth and fulfiller of our desires, is shining in the house for the welfare of the sacrificer. Clad in rays and of beautiful appearance and adored by many Agni shines like a king with his wealth. 15.

PRODUCTION OF AGNI BY FRICTION.

As stated before the process of producing fire by means of the fire-drill was discovered by the Bhrigus.

ভূগবঃ যং সহোভিঃ । ১০।৪৫।৯।

Whom (Agni) the Bhrigus generated with force, X. 46. 9.

ইমং বিধন্তঃ অপাং সমস্থে পশুং ন নষ্টং পদৈঃ অনুগম্ ।

গুহা চতন্তং উপজঃ নমোভিঃ ইচ্ছন্তঃ ধীরাঃ ভূগবঃ অবিন্দন্ । ১০।৪৬।৯

This Agni was hidden in the lap of waters—his worshippers traced him like a lost animal by foot-steps. The wise and the Yearning Bhrigus sought and with salutations found him lurking in the cave, X. 46. 2.

ইমং বিধন্তঃ অপাং সমস্থে দ্বিতা অদধুঃ ভূগবঃ বিকু আয়োঃ । ১২।৪।২

The worshipping Bhrigus placed him (Agni) in two places—in the lap of waters and in the houses of men.

II. 4. 2.

This discovery of the production of fire by friction by the Bhrigus is a very probable one. The Bhrigus worked as carpenters and were famous as makers of chariots.

এবেদিত্রায় বৃষভায় বৃকে ব্রহ্মাকর্ষ ভূগবো ন ব্রথং । ৪।১৬।২০

For the manly Indra the fulfiller of our desires we have made a hymn as the Bhrigus make a chariot. IV. 16. 20.

এতং বাং স্তোমমগ্নিনাবকর্মাতক্ষাম ভূগবো ন ব্রথং । ১০।৩৯।১৪

This hymn, O Aswius, we have made for you. We have chiselled it as the Bhrigus do a chariot. X. 39. 14.

দক্ষৈর্ভূগবঃ সংচিকিদ্ধিরে । ১০।১২।১০

The Bhrigus shine with their skill. X. 92. 10.

It is very likely that while drilling wood in making chariots they observed a rise of temperature and thence got the clue of the generation of fire by moving one piece of wood against another, as long afterwards from his observation of the rise of temperature in cannon-boring Rumford found the clue that enabled him to calculate the mechanical equivalent of heat. It is curious to notice that finding that force was required to generate fire this way, the Rishis called Agni the son of force. Thousands of years afterwards the same truth has been expressed by men of science by the phrase "heat a form of energy."

সহস্রস্পৃহাঃ ১০।১৫।৫

অনো সহসো ১১।৫৮।৮

সহসো যুবন্ ১১।১৪।১০

The two pieces of wood by the friction of which Agni was produced, were called *aravis*. The upper or the moving one was called the male and the lower or the stationery one the female *arani*—Agni's father and mother. Or both of them were called mothers and Agni was called *বিমাতা* having two mothers. This process of producing Agni was known as *মহন*—churning. It was the terrestrial daily birth of agni. In this connection he was called the *যবিষ্ঠ*, the youngest of the gods. The Rishis felt a peculiar awe seeing a living god difficult to touch like the young one of a snake, come out of dead wood—an immortal undecaying child being given birth to by decaying mother—a child consuming its mothers no sooner born. The mothers unable to suckle it.

The generation of agni by friction has been repeatedly mentioned throughout the Rigveda but it has nowhere been described with any thing like details. This was the way with the Vedic Rishis. They have always hinted at things and events but it is on very rare occasions only that they have given any description of things, in our sense of the term.

To get an idea as to how Agni was daily generated for the sacrificial purpose the best hymn is the 29th *sukta* of the 3rd *mandal*. I give below some extracts from it. There is internal evidence that this *sukta* was composed by one of the *Kusikas*, the family to which Rishi Bisvamitra belonged.

অতীতমধিমংথনমন্তি প্রজননং কৃতং ।
এতাং বিশ্ণুয়ামাতরাগ্নিং স্বংধাম পূবেথা ॥১

This is the seat on which the churning is to be done. The generating staff has been prepared. Lay on this wife of the people. We will churn Agni in the old way. 1.

অগ্ন্যোনিহিতো জাতবেদা গর্ভ ইব স্ত্রীতো গর্ভিনী ॥২

The all knowing one is hidden within the two *aranis* as the foetus is carefully placed in the child-bearing women.

উতানায়ামব ভরা চিকিৎসান্ সতঃ প্রবীতা বৃষণং জজান ।

অরুণন্তুপো রুশদন্ত পাজ ইলারাম্পুত্রো বয়নেহজনিষ্ট ॥৩

Lay on carefully the extended one, you wise priest. Being impregnated she has, at once, given birth to the manly child. It is a mass of red rays. Its rays are brilliant. The son of Ila (=Sacrifice) is born in the womb. 3.

ইলারাম্বা পদে বয়ং নাজ পৃথিব্যা অধি ।

জাতবেদো নিধীমহ্মে হব্যায় বোচবে ॥৪

O All knowing Agni we lay you in the seat of Ila— on the navel of the earth, for carrying our oblations to the gods. 4.

THE EARRY AGNI WORSHIPPERS.

As stated in the Rigveda Vivasvan was the first Agni—worshipper and it was for him that Matarisvan—probably his priest brought Agni from heaven from the far off region.

তমগ্নে প্রথমো মাতরিস্বন আবির্ভব স্ত্রুতুরা বিবস্বতে ॥১।৩১.৩

O Agni you first appeared to Matarisva for his good work for the sake of Vivasvan. I. 31. 3.

The Avestic account makes Vivasvan (Zn *Vivanghat*) the first worshipper who offered soma-libation. This is indirectly supported by the Rigveda.

Then came Yama and Manu, both of them are said to be sons of Vivasvan.

কোমা দদর্শকতমঃ সদেবো যোমেতবো বহধা পৃথগ্ভুঃ ॥১০।৫১।২

Who saw me (Agni)? Who among the gods observed my different forms? X. 51. 2.

যা যমঃ অচিকেন ॥৩

Yama found you. 3.

I shall come again to the curious *sukta* from which these two lines have been taken. Manu is known as *Kaivasvata* Manu i.e.,

Manu, son of Vivasvan as Yama has been called Yama Vaivasvata
i. i., Yama, son of Vivasvan.

যথা মনৌ বিবস্বতি সোমং শক্র অপিবঃ সূতং । বালখিল্যং ॥৪১১

Drink, O Sakra (=Indra) the offered Soma—libation as you
did in the sacrifice of Manu, son of Vivasvan. Val. 4. 1.

যজ রাজা বৈবস্বতঃ ॥৯১১২৮

Where (Yama) the son of Vivasvan is king. IX. 112. 8.

নি নামগ্নে মনুর্দধে জ্যোতির্জনার শব্দতে ॥১৩৬১২৯

Manu established you, O Agni, as a light for all generations
of men. I. 36. 19.

The next step in the history of Agni worship was probably the
discovery of the process of producing Agni by means of friction.
This, as stated above, was done by the chariot—making Bhrigus.

Atharva and his son Dadhichi were also two ancient worshippers
of Agni. Mention is made of Atharva in the Avesta in which he
is called *Athravan*. The word is supposed to be derived from
atar the Zend word for fire. But this is doubtful. For ত in
Sanskrit becomes থ in Zend e.g. Sans মিথ্র is the same as Zend মিথ্র
but not *vice versa*.

অগ্নিঃ জাতঃ অথর্বণা ॥১০১২১৫

Agni generated by Atharva. X. 21. 5.

তামগ্নে পুঙ্করাদধ্যথর্ব নিরমহুত ॥৬১৬১৩০

You, O Agni, Atharva churned out of lotus. VI. 16. 13.

তমুদ্ভাদধ্যতু ঋষিঃ পুত্র ইধে অথর্বণঃ ॥৬১৬১৩৮

It was you whom, O Agni, Rishi Dadhyang son of Atharva
kindled. VI. 16. 14.

The Agniras were not a very old family compared with the
Rishis named above but they were very distinguished worshippers
of Agni. Their relation with this god was most intimate. Agni
has been called himself *Agnira*, the eldest of the Angiras. He
has also been called Brihaspati—one of the most distinguished
members of the family.

তামগ্নে অঙ্গিরসো গুহাহিতমববিন্দু..... ।

তামাহং সহস্প্রুজমঙ্গিরঃ ॥৫১১১৬

The Angiras found you, O Agni, hidden in the cave.....
Angira, they call you son of force. V. 11. 6.

ধ্বতং শংসন্ত ঋজুদীধানাদিবস্পুত্রাসো অমরন্ত বীরাঃ ।

বিপ্রং পদমঙ্গিরসো দধানা যজন্ত ধাম প্রথমং মনন্ত ॥১০।৬৭।২

Praising truth, meditating in the right way the heroic sons of Dyaus—the great spirit, the Angiras holding the rank of ages, first glorified the sacrificial rites. X. 67. 2.

তমগ্নে প্রথমো অঙ্গিরা ঋষিঃ ॥১০।৩১।১

O Agni, you were the first sage Angiras. I. 31. 1.

পূর্বঃ অঙ্গিরাঃ ॥১০।৯২।১৫

(Agni is) the ancient Angira. X. 92, 15.

যবিষ্ঠং ত্বা যজমানা হবেম জ্যেষ্ঠমঙ্গিরসাং বিপ্র মদ্যার্জবিপ্রৈভিঃ শুক্র মন্যভিঃ ॥১০।১২৭।২

You the most youthful god, the eldest of the Angiras, we the sacrificers will invoke—O sage, with hymns, O Bright one, through hymns and sages. I. 127. 2.

A. C. SEN.

*THE AIMS OF THE UNIVERSITY. FROM THE
GERMAN OF PROF. PAULSEN.*

[The present article consists of a literal translation of parts of Prof. Paulsen's work "Die deutschen Universitäten ("The German Universities"). The ideals here set forth are imperfectly achieved even in Germany, and but dimly seen in England, so that they are hardly within reach as yet of the Indian universities.

It should perhaps be explained that in the examination for the degree a dissertation is submitted by the candidate, who also undergoes an oral examination, chiefly in the subject-matter of the dissertation. In this translation the word *Science* has been used as the equivalent of the German word *Wissenschaft*, which however has a much wider meaning, and includes all reasoned knowledge, as for instance history and archæology.]

THE numerous forms of universities at present existing may be reduced to three ultimate types, the English, the French, and the German. Of these the English type, as represented by the two venerable universities of Oxford and Cambridge; is the oldest; in it the original form of the mediæval university has been most nearly preserved, England being the most conservative country in Europe and the most tenacious of tradition. From England this type crossed over to North America. The University in these countries is an autonomous body; it governs itself and is supported by its own funds, which are derived from endowments; the State Government is not concerned with its general administration. The mode of life is essentially that of the mediæval University; teachers and scholars live together in the "colleges" and "halls" in a sort of monastic common life. The instruction also resembles in matter and form that of the old University, and its chief faculty, the *Faculty of Arts*. Its aim is really a widened and deepened general education, such as is suitable for a "gentleman," and real scientific research as well as technical preparation for practical life are alike outside its regular task.*

* Except in theology, law and medicine.

If we carefully consider the inner nature of the German university, its special character appears to be this, that it is both a workshop for scientific research and an institution for the highest scientific instruction, technical as well as general.

The German university is what the French and English universities are not, the chief centre of scientific work in the country, and at the same time the nursery of scientific research. According to German ideas the university professor is at the same time teacher and scientific investigator. In fact the latter stands in the higher place, so that really we must say that in Germany the scientific investigators are also the instructors of academic youth. This implies also that academic instruction is purely scientific, and the front place is taken not by preparation for a practical calling, but by introduction to scientific knowledge and research.

This combination therefore of research and teaching is the peculiar characteristic of the German university. In Oxford and Cambridge there are men of great learning, but no one would call the English universities the pillars of scientific work in the country. Many of the greatest English scholars, men like Darwin, Herbert Spencer, Grote, the two Mills, Carlyle, Macaulay, Gibbon; Bentham, Ricardo, Hume, Locke, Shaftesbury, Hobbes, and Bacon, were not university men, and it might be said of several of them they would have been impossible people in an English university.

In Germany, on the other hand it may be taken for granted that all university teachers are scientific investigators or real scholars, and, conversely, all real scholars are University professors.

The consequence is that our thinkers and investigators are not merely known to the people as writers—a mere paper acquaintance—but as personal teachers whom they have seen face to face. Men like Fichte, Schelling, Hegel, and Schleiermacher influenced their age chiefly as academic teachers. Their influence as writers was not particularly great. A great part of their writings was first published after their death, from sketches for lectures or notes of these taken by pupils. .

This relation is beyond a doubt advantageous to both sides. The youth of Germany, which comes into immediate contact at the University with the intellectual leaders of the people, falls under the deepest and most abiding influences. On the other hand, it is a pleasant and advantageous relationship for scholars and investiga-

tors, who being in contact with the young, remain young themselves. The personal communication of thought, and the unexpressed yet unmistakable response on the part of the audience, has a rousing and enlivening effect which the solitary writer can never attain. The presence of an audience keeps the teacher close to realities and common interests. The tendency to philosophising and general ideas which is alleged against German thought, is doubtless connected with the fact that in Germany more than elsewhere learning is acquired with a view to its communication by word of mouth.

The objects of study may be described as three (1) scientific knowledge of a subject (2) capability for independent scientific work (3) philosophical education. He who takes away with him these three things from the University, may say to himself that he has made good use of his time.

I. *Scientific knowledge of some subject.*—This implies a sure grasp of the scientific knowledge required in a man's profession, and an insight into the objects it has in view.

II. *Capability for independent scientific work.*—This means a readiness in following scientific research, in testing it by one's own judgment, lastly in taking it up and following it out one self. The aim of study is not merely to learn and acquire knowledge, but to get an independent judgment, and to proceed if possible to independent scientific work. The latter is not attainable everywhere and by every one, but the former is absolutely necessary; he who cannot achieve an independent development of knowledge, through its conditions and principles, has no scientific insight, but only opinions taken on trust. Independent judgment can only be acquired by the possession of *method*, by the aid of which facts are ascertained, conceptions formed, and proportions proved, so that the acquisition of method is a necessary aim of scientific study. Along with this the impulse to co-operate in research will also appear, for when a man has learned to handle a tool, he becomes impelled to use it. This has been splendidly put by H. V. Sybel: "What is required is not to learn the whole realm of knowledge from the study of its ultimate sources, that is impossible. The essential thing is that the student should gain a clear perception of the task that science has to do and the methods whereby it acquits itself of this task. It is necessary that at some points or one at least he should carry out these methods himself, and should follow up a

certain number of problems to their utmost development, until he can say to himself that there is no one in the world who can teach him anything more on this particular point, here he stands firm and sure on his own feet and decides according to his own judgment. This consciousness of independence acquired by a man's own resources is a treasure beyond price. It hardly matters, what the object of his researches was. It suffices that they have in ever so small a matter freed him from scholastic dependence and tested those powers and those methods whereby henceforth any new problem may be tackled and similarly solved. In the joyous period of youth they have ripened the boy into a man."

III. *Philosophic Training.*—When a man leaves the University he should have laid the foundations of a view of life and the world which is personal to himself and is founded on reasoned thought. I say 'foundations,' for the edifice will not be complete. Life is the last instructor in philosophy. * * Mere technical knowledge without philosophy gives a man no claim to a place in the class that leads the people.

SPRING.

Come, gentle Spring ! ethereal mildness ! come ;
And from the bosom of yon dropping cloud,
While music wakes around, veiled in a shower
Of shadowing roses, on our plains descend.

* * * * *

And see where surly Winter passes off
Far to the north, and calls his ruffian blasts :
His blasts obey, and quit the howling hill,
The shattered forest, and the ravaged vale ;
While softer gales succeed, at whose kind touch,
Dissolving snows in livid torrents lost,
The mountains lift their green heads to the sky.

As yet the trembling year is unconfirmed,
And Winter oft at eve resumes the breeze,
Chills the pale morn, and bids his driving sleets
Deform the day delightless : so that scarce
The bittern knows his time, with bill engulfed
To shake the sounding marsh ; or from the shore
The plovers when to scatter o'er the heath,
And sing their wild notes to the listening waste.

At last from Aries rolls the bounteous Sun,
And the bright Bull receives him. Then no more
The expansive atmosphere is cramped with cold ;
But full of life and vivifying soul,
Lifts the light clouds sublime, and spreads them thin,
Fleecy, and white, o'er all-surrounding heaven.

Forth fly the tepid airs, and unconfined,
Unbinding earth, the moving softness strays.
Joyous, the impatient husbandman perceives
Relenting Nature, and his lusty steers

Drives from their stalls, to where the well-used plough
Lies in the furrow, loosened from the frost.
They lend their shoulder, and begin their toil,
Cheered by the simple song, and soaring lark.
Meanwhile, incumbent o'er the shining share
The master leans, removes the obstructing clay,
Winds the whole work, and sidelong lays the glebe.

White, through the neighb'ring fields the sower stalks,
With measured step, and liberal throws the grain
Into the faithful bosom of the ground :
The harrow follows harsh, and shuts the scene.

Be gracious, Heaven ! for now laborious man
Has done his part. Ye fostering breezes, blow !
Ye softening dews, ye tender showers, descend !
And temper all, thou world-reviving Sun,
Into the perfect year !

THOMSON.

*ADMINISTRATION OF THE AFFAIRS OF CEYLON,
1896-1903.*

[EXTRACT FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW.]

V.

POST OFFICE AND TELEGRAPHS.

There is no more reliable index of a country's prosperity than the Post Office return. The Post Office, as it exists to-day, converse so wide a field of activity that, were all other information denied us, Postal statistics would still furnish a sure indication of progress or decline. We may therefore congratulate ourselves viewed from this standpoint, Ceylon comes triumphantly out of the test. The expansion in every branch of the Post and Telegraph Department during the last years has been indeed remarkable. The weight of mails has doubled; the number of parcels transmitted by the Post Office has increased 60 per cent. Money orders have risen 90 per cent. in number and 70 per cent. in value; the number of Savings Bank accounts has increased 80 per cent., and the amount to the credit of depositors 73 per cent. while in the number of telegrams despatched there has been an extraordinary advance of 168 per cent.

There was hardly a department in Ceylon, I venture to say, which stood in more need of re-organisation six years ago than the Post and Telegraph Department.

If you will pardon a slight digression at this point, I should like to ask whether the public in this Colony realize their advantages in the matter of cheap postal and telegraphic facilities. In Ceylon you can send a telegram for fourpence, a letter for less than a penny, and a postcard or a newspaper for a third of a penny. If unfavourable comparisons are sometimes made between your railway rates and those of other countries, it will I think be admitted, on the other hand, that your postal service is one of the cheapest in the world.

Turning to the more normal history of the department, I find that the number of post offices has increased from 139 to 149, while there are now 88 telegraph offices, as against only 59 in 1895. Receiving offices, *i.e.*, offices established solely for the collection and delivery of mails in places where there is not sufficient demand for a complete post office with money order savings bank facilities, have increased from 148 to 190. Railway stations form convenient receiving offices, and a number of outlying districts, to which postal facilities have hitherto been denied, will doubtless soon reap this additional benefit from the advent of the new railways.

Money orders have made a most remarkable advance during the last seven years. As I have already informed you, they have risen 90 per cent. in number and 70 per cent. in value. Most of the money goes to India in the form of cooly remittances, kangannies' advances, and payments for value-payable parcels which are received here in ever-increasing numbers. Last year, for example, Rs 3,490,593 was remitted to India by money orders.

The Post Office Savings Bank is in a satisfactory condition, and the number of depositors has steadily increased during the period.

I have not space on this occasion to do more than touch on the various improvements which have been made in the postal service with other countries. No pains have been spared to secure for the Colony the quickest and cheapest means of communication with other places, and a noteworthy feature of the period has been the increased use of French and German steamers. Ceylon, in fact, is particularly fortunate in her service of foreign mails owing to the number of important steamers which call at Colombo. A great improvement is manifest in the foreign parcel post system.

A new and improved system of sorting has recently been introduced into the General Post Office, with a consequent appreciable expedition in the delivery of mails. I think, however, that the time has arrived when a proposal which has been more than once adumbrated, namely, to sort the English mails in the steamers between Aden or Suez and Colombo, should receive full consideration. The cost would almost certainly be large and may prove to be prohibitive, but I have directed the Post-

master-General to make inquiries on the subject. The advantages would undoubtedly be considerable, for a few hours' delay in the delivery of correspondence may well mean several hours lost in the transaction of business; and from another point of view the arrival of the English mail already sorted would not unfrequently mean that up-country residents would get their letters a day earlier. It remains to be seen, however, whether these advantages are sufficient to justify the expenditure involved.

Your Telegraph system has been liberally extended since 1896. In mileage its lines have increased from 1,000 to 1,500 and 1,000 miles of wire have been added.

In 1896 the plant of the Oriental Telephone Company was taken over by the Post Office, improved instruments and materials were provided, and you have now 300 miles of wire on the metallic return principle. It must, however, be admitted that the telephone system of Colombo is not worthy of the capital of this prosperous Colony, and steps are now being taken to effect such improvements as will, I hope, make the exchange one which will satisfy all public, and private requirements.

A word must be said as to the financial aspect of the Ceylon Post Office. Though its revenue has shown a satisfactory advance of 45 per cent. on the revenue of 1896, expenditure has also advanced, and there is still a nominal deficit each year on the working of the department.

CRIME.

So far, Gentlemen, it has been my pleasant duty to tell you the story of almost uninterrupted prosperity and progress, I think that you will admit that the figures which I have put before you as evidence of this advance are quite conclusive. They supply us with a definite and very satisfactory comparison between the position of the Colony seven and a half years ago and its position to-day. But a subject of a more difficult character now confronts me; one, moreover, in which I am met at the outset by deficiencies in the means of comparison which are baffling. I refer to the subject of crime. The utmost care is unquestionably required in drawing inferences from even the most complete criminal statistics, but where, as in the case of Ceylon during the last seven years, a new and thorough system of investigating

and reporting crime has been introduced, the difficulties in the way of making a comparison are very greatly increased.

But whatever might be the result if we possessed accurate means of comparison, I shall not attempt to disguise the fact that our actual criminal statistics up to the year before last disclosed no material diminution in serious crime. There were fluctuations from year to year, the returns sometimes encouraging the hope that a less criminal era was dawning, and at others—for example, in 1901—causing much disappointment. The reports for last year, however, showed a welcome change to a more satisfactory state of things, and the figures for this year are also favourable, so that I shall, I think, be justified in claiming that the unremitting care and attention which I have devoted to impressing on all my officers the paramount importance of prompt inquiry, prompt following up of offenders, and prompt report to courts, have not been fruitless, but have generated a spirit of relentless antagonism to crime which will, I hope, not be allowed to wane.

From the very first year of my administration the prevalence of violent crime in this Island has caused me grave concern and anxiety. When I arrived here in 1896 I found the state of things, especially as regards culpable homicide, to be deplorable. The number of murders (147) which took place in Ceylon in 1895, as remarked in my opening address in 1896, was six times as great as the number committed, in proportion to the population, in Great Britain and Ireland. In 1896 there were 134 murders, and one case to 24,500 persons, and in 33 of the cases the accused were acquitted, while 11 cases were practically undetected. In 71 of these cases the instrument used was a knife or some other cutting or stabbing weapon. In addition to these, there were 476 true cases of voluntarily causing grievous hurt with dangerous weapons, or 15 cases for every 100,000 inhabitants. Further, there were no less than 2,143 thefts of cattle and prædial produce. A comparison of crime with the population showed that 1 out of every 817 persons committed a serious crime, a very unsatisfactory proportion.

Another disquieting feature in the situation was the large proportion of cases in which there was a failure to secure the conviction or committal of the accused. Out of 18,071 cognizable

offences committed in 1896, in which 27,119 persons were concerned, only 13,535 persons were committed or convicted in 9,397 cases. In other words, nearly half the crime remained unpunished.

My earliest attempts, therefore, were directed, first, towards devising means by which the dangerous tendency of the Sinhalese to the use of the knife might be eradicated ; and secondly, towards obtaining a more prompt and searching investigation of offences, with a view of preventing the suppression of cases of serious crime and securing the more certain punishment of the guilty parties.

To effect these objects I found it necessary in my first year of office to ask this Council to arm me with fresh powers.

Whatever may be said of the success or failure of the efforts to diminish crime in the Island, those who have devoted the closest attention to the subject are agreed that very little crime now passes unnoticed and unreported, while investigation is immeasurably more prompt and, we may therefore hope, more thorough than in the days gone by.

There is some diversity of opinion among Government Agents and Magistrates as to the extent to which the inquirer have fulfilled expectations, but the general verdict appears to be that that they form a very useful auxiliary for the purpose of investigating cases of sudden deaths and cases where the offender is unknown.

It is a difficult problem to discover whether the remedy of the lash has a materially deterrent effect. Every case in which lashes have been ordered has received my most careful consideration, and the sentence is never confirmed unless I am personally convinced of its justice. Of late years, I have been disinclined to confirm sentences of flogging except when premeditation is clearly established. Consequently, whereas the average annual number of prisoners flogged on the orders of the Court during the years 1897-1901 was 320, the sentence was carried out last year in 70 cases only.

In 1898, I made a further attempt to grapple with the reign of the knife which has caused Government so much anxious concern. There was already on the Statute Book an Ordinance under which it was made an offence for a person to wear a knife

in a district which had been proclaimed by the Governor, but that measure could only be applied when offences connected with the knife were epidemic, and not, as it generally the case, when they were sporadic. Its provisions were far too drastic for general application, and it was consequently of little practical effect. By Ordinance No. 3 of 1898 it was made an offence for any person to wear a knife who has been convicted of unlawfully using a knife, or who is proved to be a dangerous character and who has been prohibited by a magistrate from wearing a knife for a certain period without a license from the Government Agent. Since the enactment of this measure 858 orders have been made by magistrates, which may be taken as an indication that the Courts consider the power conferred by the Ordinance a useful one. I am, however, inclined to think that there has not been the same alacrity on the part of the Police and headmen to prevent the evasion of these orders. If energetically administered by both the judiciary and the executive officers, the Ordinance should provide a most useful means of disarming those whose uncontrollable impulses are a menace to the community.

Quiet and law abiding as the people of this Colony normally are, yet they are impulsive, excitable, and often ignorant, and therefore credulous. This credulity agitators often use for their own purposes, and whenever there have been riots or disorder, not originating in racial or caste feelings, they may invariably be traced to mischievous men of some education working on the credulity and the ignorance of the people, and persuading them that violence will induce the Government to give way on some moot question. It is astounding that in these days such ignorance should prevail, but the possibility of such mischievous and dangerous delusions proves the necessity of a strong and consistent Government over a people generally tranquil and orderly, but excitable by temperament and too often ignorant by training.

A lamentable instance recently occurred in Anuradhapura. Anuradhapura, up to 1873, when the North-Central province was created by Sir William Gregory, was indeed a buried city. It was a mass of entangled jungle up to the very doors of the few Government buildings then existing. There was no town, hardly a bazaar, and the only access for pilgrims was along the main road, whence they had to grope their way as best they could by

narrow and devious paths to the sacred shrines buried in thick jungle. The British Government have changed all that. The jungle has been driven further and further back, the shrines have been disinterred and exposed to the light of day, a town has been built, and wide roads constructed. Gratitude has not been the reward of the Government. A local branch of the body known as the Maha Bodhi Society has sprung into existence, some of the members of which have put forward on behalf of the Buddhists the most extravagant claims to Crown lands in Anuradhapura, and whose ultimate object, there is unmistakable evidence to prove, is the total exclusion from the town and its environs of all persons not of their persuasion. The claims advanced were refused by Government, and when an appeal was made to the Secretary of State he also rejected them.

I have endeavoured to trace what connection, if any, exists between crime, especially the crime of murder, and drunkenness and gambling. As regards homicides during the last seven years, an examination of the circumstances of each case has shown that arrack drinking was directly responsible for one-ninth and gambling for one forty-seventh of the total number of cases. Neither drink nor gambling, therefore, appears to have had so much influence in inciting to crime as is commonly supposed. The motive which prompts those who commit these crimes, in many of the cases, is obscure, but, as far as can be ascertained, disputes about land and women are the main causes of the murders in this Island.

It is still more difficult to make any reliable inferences from the general figures for violent crime, but, as far as the statistics can be depended upon, they do not tend to confirm the idea that drink and gambling are chiefly responsible for crime.

I have examined the returns of taverns in the various provinces to see if they afford any support to the theory that where there are taverns there crime is rife, and *vice versa*. At first sight the theory seems to have a sound foundation in fact, inasmuch as the two least criminal provinces in the Island, Uva and the North-Central, are also the two where there are fewest taverns in proportion to the population. But these provinces are also the most thinly populated in the Island, and when I turn to the more densely populated districts, the theory appears to be quite untenable.

In fact, gentlemen, although I am far from denying the lamentable effects of excessive arrack drinking, I am bound to confess that the available statistics do not confirm the idea that taverns and distilleries are the principal sources of crime. This is not the occasion, nor are the materials available, for dealing exhaustively with so controversial a subject, and I must content myself with the warning that a too relentless war against the legitimate taverns and distilleries may bring in its train the far more pernicious evil of illicit sales.

To the many perplexities which surround this difficult problem of violent crime, another disturbing element has been added in recent years. I refer to the increased number of shooting cases. Of the 134 murders in 1896, the knife was used in 71, and firearms in 13 only. Last year the knife was the fatal instrument on 60 occasions, but in no less than 30 instances the victims were shot.

Burglaries have figured far too largely in the returns. Comparing 1896 with 1902, I find that the number of house-breaking cases in the former year was 843, while last year it was 1,433. The percentage of convictions was 2.72 in 1896 and 1.67 in 1902. Vigorous efforts have been made to cope with the periodical burglary epidemics in Colombo by the substitution of an improved system of patrol beats, and other measures, but, as I have more than once had to remind you, the changed conditions of life produced by the spread of civilization involve consequent new obligations as regards the safe custody of property, and the remedy for these numerous thefts—for in many, I might almost say most cases these so-called burglaries are little more—lies with householders themselves, who could very materially diminish their liability to loss by the adoption of ordinary precautions which are considered the indispensable necessity of Western civilization.

You will remember, however, that in my address to the Council last November I confessed to a feeling of dissatisfaction that the Police were comparatively unsuccessful in their efforts to bring miscreants to justice. As I said then, there is no doubt that the detective ability of the force is poor, and it stands badly in need of strengthening. During the last twelve months the Government has devoted considerable time and attention to a very careful examination of proposals for improving the material of which the Police is composed.

But after all, Gentlemen, the regular Police form but a small portion of the force at our disposal for the detection and punishment of crime. Except in isolated instances, regular Police forces are established only in towns, and in the thousands of villages scattered throughout the Island the instruments with which we have to work are the headmen, who are selected from the local men of property and influence. These men receive no salary, and from time to time indignant protests are hurled against Government for continuing a system to which the critics do not hesitate to ascribe the deplorable prevalence of crime in this Colony. Since the inauguration of the new system Government has voted an average annual sum of about Rs. 30,000 towards the remuneration of these deserving officers, but I need hardly say that this amount is trivial compared with the sum that would be required if we were to embark on a scheme of salaried police headmen for all the rural districts. I certainly do not, however, favour the present system solely or mainly on the ground of economy, for I concur with the opinion of the Government Agents in thinking that the headmen of this Island have done much excellent work, and that under a supervision which is strict and constant, but at the same time intelligent and sympathetic, they will continue to be in the future, as they have proved themselves in the past, a most useful and valuable body of public servants.

On the other hand, the number of convictions for false evidence is quite disproportionate to the appalling amount of perjury in Ceylon Courts, and I am inclined to think that Police Magistrates might do more in the way of bringing serious cases to the notice of the Attorney-General whenever there is a fair chance of obtaining a conviction. I believe that in the cases where the Magistrates have exercised their powers of summary punishment the results have been distinctly beneficial. The danger of hasty or unfair punishment is obviated by the requirement that every case in which a witness is summarily punished for perjury has to be submitted to me for approval. Inasmuch as a convicted witness has also the right of appeal to the Supreme Court, there are clearly ample safeguards against a mistaken sentence.

One of the most pressing needs of the Colony six years ago was the want of a good Reformatory. The Director of Public Instruc-

tion states that he knows of no institution in Ceylon which is in such a thoroughly efficient condition as the Maggona Reformatory.

Do not misunderstand me, however. Although to outward appearance the actual criminal statistics may seem to show little advance since 1896, it must not therefore be inferred that the position is the same to-day as it was then. It cannot be denied that the machinery for reporting and investigating crime has been improved in a very marked degree; it is also indisputable that very few cases are now compounded. These improvements of necessity tend to increase the present-day figures, and so preclude favourable comparisons with the figures of previous years. It is not unreasonable, therefore, to assume that statistics, which apparently reveal a stationary condition of affairs, in reality contain the evidence of an appreciable advance. In one respect at least where comparison is possible—*i.e.*, as regards convictions—the actual figures are, as I have already stated very satisfactory, the proportion of convictions and committals having increased nearly 20 per cent. since 1896. Unlike the West, murder in Ceylon is as a rule detected, and the arm of the law seldom fails to reach the murderer.

Gentlemen, I have done my best to grapple with crime, and my efforts have been partially successful, but the unfortunate prevalence among the Sinhalese of grave personal assault remains the great problem of criminal administration in this country. But, on the other hand, let me remind you that the moral condition of some 3½ millions of people is not to be judged and condemned on account of the tendency towards violent crime of comparatively few persons among them. The moral tone of the people generally, I have no hesitation in saying, is on the whole good, and bears favourable comparison with that of any other Eastern people. The Sinhalese, to which community violent crime is chiefly confined, are a gentle, tractable, and peaceable people. They are charitable to an extent which would be considered Utopian by Western nations. No poor house or other form of relief is required for the destitute. Poverty there is, but not starvation, for private charity and neighbourly kindness voluntarily and quietly do the blessed work of relief.

The Sinhalese number 2,330,807. The annual average number of murders among them during the seven years has been 109.

These murders, however, have been seldom committed by bad or desperate characters, but have generally been the acts of respectable men of harmless habits, whose naturally hot and impulsive tempers have tempted them to yield to sudden provocation, and on the spur of the moment to use the knives which the Sinhalese always carry on their persons. Among the other races of the Island violent crime is comparatively rare, and it would be unjust to condemn a whole people, even the Sinhalese themselves, whose lives are generally harmless, because of the sin of the relatively few who offend.

Moreover, I believe that if the criminal statistics of this Island were drawn up so as to differentiate between crimes of impulse and crimes of premeditation, it would be found that as regards the latter—surely the more heinous type—Ceylon compares remarkably favourably with even Western nations. There is here, for example, a striking absence of those crimes of wanton and unprovoked brutality which have, especially in recent years, become such a menace to society elsewhere. The Sinhalese natives of this Island are indeed lamentably prone to savage assaults, but they rarely commit them except under the influence of ungovernable passion, roused in most cases by provocation on the part of the victim. Every effort must therefore be made, by the fear of a stern enforcement of the law, to create a public opinion in each village which shall serve as a deterrent.

But, although vigorous prosecution and severity of punishment may bring about a fitful improvement, there can be no radical change until under the ameliorating influence of education and discipline a new generation arises in which the savage instincts of revenge and retaliation have not the complete mastery of reason and humanity. Education is the only true and lasting remedy, and this is sufficient justification of our growing expenditure on education.

Pending the necessarily slow progress of education, we must rely on the effective administration of the law. Much depends on the Magistrate—often a young civil servant. I am happy to say that, as a rule, he is far more efficient than he was a few years ago. Seldom is now heard the scathing criticism from the bench of the Supreme Court which used to be so common. The reason

is that there is more supervision and instruction of the younger Magistrate. Left free to arrive at an independent decision on the evidence recorded, his procedure is closely supervised, and circulars issued with the approval of the Attorney-General keep him acquainted with the requirements of the law and the latest rulings of the Supreme Court. There is one improvement which I should like see effected, and that is a more helpful, considerate, and sympathetic spirit inspiring Magistrates and District Judges in their relation with the Police and headmen, when the latter try to do their duty. There is too often a somewhat captious inclination to criticize and find fault. Perfection is not to be found in any branch of the service—certainly not in the Police—and the Magistrate or Judge should remember that his duty is to help and co-operate with the police in the punishment of crime, and that by censorious and hypercritical comments he not only discourages the unfortunate policeman whom he publicly gibbets, but that he actually encourages and assists the criminal who preys on society. In my retirement I will watch the struggle of my successor with crime, and pray that far more success than I have been able to command may attend his efforts.

HOSPITALS AND DISPENSARIES : MEDICAL DEPARTMENT.

On the occasion when I addressed you at the opening of the session of this Council of 1896-1897, I made the following remarks regarding your expenditure on medical requirements: "It is said sometimes that we spend too much on education, on hospitals, and other institutions of that kind. This argument would be plausible enough if we ruled this Island on purely commercial principles. But England does not rule her dependencies on purely commercial principles. She recognizes her duties and responsibilities to the native population wherever she hoists her flag. The promotion of commerce, the development of the resources of the country—those, of course, are of paramount consideration; but equally important is the amelioration of the lot of the native population and care for their physical and moral welfare. These are the principles on which England rules. These are the only principles on which she consents to rule. They are the price which we must consent to pay for our connection with the British Empire; and, therefore, those

who are inclined, if there are any, to repine idly over this expenditure—on what may be called ameliorative institutions—are kicking against the pricks. But, of course, there is a limit to expenditure even of this kind. There is a limit which is imposed by our means, our revenue, and there is a limit which is imposed by the requirements of the country. As regards education, I must confess that either limit is not within sight; but as regards hospitals, the time is coming when we may hope to reach finality in relation to the construction on a large scale of hospitals and dispensaries. Ceylon has reason to be proud of her hospitals. She has nobly done her duty in this direction, and, under Dr. Kynsey's vigorous administration, vast strides towards finality have been made. During the last twenty years, I find we have expended on an average Rs. 100,000 annually on building hospitals and dispensaries; and I further find that the cost of establishments for these hospitals and dispensaries has increased from Rs. 600,000 in 1876 to Rs. 1,050,000 in 1890 and Rs. 1,303,000 in 1895. The time seems to me to be approaching when the Island will be equipped with all the hospitals and dispensaries which it can require and which we can afford to construct and keep up; and, consequently, I asked Dr. Kynsey to give me a list of all hospitals and dispensaries which he considered would be necessary to meet the requirements of the Island for a long term of years to come. That list was examined by the Director of the Public Works Department, and the cost of carrying out that programme was estimated by him at the sum of Rs. 750,000. The cost of the additional establishment for these new hospitals and dispensaries would amount to an annual sum of Rs. 141,000. This expenditure, I think, Gentlemen, ought to be spread over a term of years, and I am inclined to think a fixed sum should be set apart annually in order to carry it out."

This estimate of the medical requirements of the Colony was, I fear, somewhat sanguine, for it has been already exceeded. During the seven years 1896-1902 Rs. 1,098,838 have been expended on new hospitals and dispensaries. In other words, during these seven years the amount spent on the construction of and additions to hospitals and dispensaries has averaged Rs. 150,000 a year, as against the average of Rs. 100,000 a year, the amount spent in the previous twenty years, while the expenditure on the

Medical Department itself has risen from Rs. 1,312,177 in 1895 to Rs. 1,797,489 in 1902.

The money has not been wasted. During my term of office two new wards, giving accommodation for 90 patients, have been added to the Colombo hospital, and among important new medical institutions which have been completed since 1895 are the Lady Have-lock hospital for women and children ; modern well-equipped and well-planned general hospitals in the planting districts of Ramboda, Deniyaya, Pussellawa, Dimbula, and Maturata parangi hospitals at Buttala and Maha-oya, and thirty-three Government dispensaries. Two wards have been built for lepers in the hospital at Kalmunai in the Eastern province, while considerable increase has been made in the accommodation at the main leper asylum at Hendala near Colombo. One of the largest works I have sanctioned is a new administration block for the General Hospital, Colombo. This hospital receives as many patients in the year as the largest of the London hospitals, and for years the work has been considerably hampered by the want of an administration block. This building is now in course of construction, and will consist of a ground and first floor. On the ground floor will be an out-patient department with examination and dressing rooms and offices, rooms for the examining medical officer, for students, and nurses on duty, and office for the Superintendent of the hospital and his clerks, a Coroner's room and dispensary. The first floor will provide living rooms for the ten European nurses and for the resident medical staff of house physicians and house surgeon.

In all, there are now 509 medical institutions in the Colony, including branch dispensaries, as against 317 in 1895, and the number treated in hospitals and dispensaries has risen from 794,700 to 1,041,615 during the period.

As regards the future, the Principal Civil Medical Officer considers that before the question of providing any new hospitals is considered those already existing should be completed by the provision of medical officers', apothecaries', nurses', and servants' quarters, administration buildings, operating and mortuary rooms, and so on, and by bringing some of the institutions up to the requirements of modern times. More accommodation for lepers will also require early consideration.

The department has been ably and vigorously administered since 1898 by Dr. Allan Perry, and its high reputation, which was so worthily maintained during this period of special strain on its resources, is not by any means confined to Ceylon. During the past eight years there have been frequent applications from the Straits Settlements for officers of the Ceylon medical service, while in 1897 four members of the department proceeded to Uganda in response to an application from the Government of British East Africa for hospital assistants. Similar applications have been made for surveyors from our Survey Department; and there are some, I believe, who consider that such applications should be refused. "Why," they say, "should we go to the trouble and expense of training medical officers, surveyors, &c., for other Colonies?" Gentlemen, I have very little sympathy with this attitude, which seems to me to be not only selfish as regards the interests of other parts of the Empire, but also short-sighted as regards our own. These applications, by offering prospects of a career and advancement outside the Colony, afford a most useful spur to the more adventurous of those Ceylonese whose opportunities at home are naturally limited. On the other hand, they are a testimony to the high repute enjoyed by the Colony, and redound to the credit of those who are responsible for the training of the junior members of the departments I have mentioned. There is happily no lack of suitable men to take the places of those who thus leave our shores.

GENERAL HEALTH AND SANITATION.

The general health of the Colony during the period of my administration has been good. The death-rate has varied from 23.2 per thousand in 1897 to 30.2 in 1899, and although the average, 27.6, for the decade 1891-1900 is higher than the figure for the previous decade, 24.3, the rise is believed to be due rather to improved registration than to deterioration of the public health. The birth-rate returns show an advance from 31.1 per thousand in 1895 to 39 in 1902. Since 1897, however, when the new Ordinance regarding registration came into force, the rate has only once sunk below 38 which appears to be our normal birth-rate. At the last Census it was found that the population of the Island had increased 18.6 per cent. in the decade, a rate double that of the

previous decade, four times the rate (4.5) in the neighbouring continent of India, and double the increase of the population of the United Kingdom.

In respect of contagious and infectious diseases, there has been a remarkable improvement. Take, for instance, the two septennial periods 1889-1895 and 1895-1902: in the former the deaths from cholera and small-pox totalled 5,353; in the latter period the number was only 1,424. In fact, the victims of cholera alone in the one year 1891 outnumbered the total deaths from cholera and smallpox during the seven years 1896-1902. The cholera figures are so striking as to bear quotation: from 1890 to 1895 there were 8,430 cases with 4,634 deaths; from 1896 to 1902 there were 2,000 cases and 1,207 deaths.

There is one feature in the returns of epidemics during the last seven years which must cause some uneasiness, but which should furnish a valuable object-lesson if heed is paid to its salutary warning. I refer to the spread of enteric fever. Enteric has achieved a dread notoriety in the last few years, and it annually claims a large number of victims in this Colony. The figures for the seven years 1896-1902 are very unsatisfactory compared with those for the previous period, cases having risen from 383 to 1,410, and deaths from 124 to 428. The Principal Civil Medical Officer informs me that the increase is partly due to the large number of enteric cases introduced by the prisoners of war and some French soldiers landed here during the last two or three years, and he explains that probably some of the increase is nominal only, in view of improved notification to the proper authority and improved methods of diagnosis which the establishment of the Bacteriological Institute has rendered possible. There is, however, little consolation in the discovery that the smaller figures of a previous period were due to adventitious causes, such as defective notification and imperfect diagnosis: the fact remains that our modern returns disclose a prevalence of enteric, which I am convinced could be prevented if perfect sanitary conditions generally obtained. Chief among these conditions is the all-important question of water supply; and in concluding my review of the general health of the Colony I would invite your special attention to this vital question.

The supreme importance of a pure water supply, which has long ago been accepted as an axiom in all Western sanitary science, has,

it must be admitted, received very slight recognition in this Colony in the past. As I remarked in my address to this Council in 1898, a supply of pure drinking water is an essential which has been long neglected, but if we wish effectually to keep epidemic disease out of the Island, we must take vigorous steps to remedy the present state of things, for in a town or village where the people drink impure water the seeds of disease will find a congenial soil.

It is frequently a matter of comment that the indigenous population of the Island succumb more readily to the peculiar diseases of the tropics than those to whom a tropical climate is foreign. The constitution of the latter is, of course, naturally the stronger, and his reserve of native force happily enables the European generally to throw off the attacks of disease even when he cannot escape them. But there can be little doubt that the great secret of the white man's health is his careful observance of the fundamental laws of sanitation. It is as natural to him to expect and to insist that the water he is to drink, or in which he is to wash, shall be as absolutely clean as it is possible for it to be, as it is for the ordinary native villager to accept the reverse state of things with indifference. This vital difference in the attitudes adopted towards water supply produces some curious results. It often happens that places which are shunned by natives are found by Europeans to be little, if any, more unhealthy than other parts of the Island. Kurunegala is a striking instance of this.

Ceylon is not alone in having laid itself open in the past to the reproach of shelving this important question. In the Presidency of Madras, as in Ceylon, isolated schemes were occasionally proposed by municipalities, and officers from the Department of Public Works were seconded to draw up proposals. This went on for years, and little if anything was done. Finally, in 1890 a permanent appointment of a sanitary engineer to the Government of Madras was made, and a systematic survey of the Presidency towns was followed by definite proposals. The Madras Government then adopted a very liberal policy as regards the provision of funds for the carrying out of these works, and the grants to councils varied between 50 and 75 per cent. of the cost of the projects in many cases, the balance being lent for thirty years at 4 per cent. interest. About three to four lacs of rupees annually have thus been spent. I think that Ceylon should follow this excellent example. The special officer

appointed, Mr. R. W. Smith of the Public Works Department, has already formulated definite schemes for four important towns. Without counting Diyatalawa, where a complete water supply for the prisoners of war was provided at a few months' notice practically without surveys and plans, Mr. Smith, under the supervision of the Director of Public Works, has drawn up systematic schemes for Rambukkana, Kurunegala, Negombo, and Jaffna, which when carried out will provide a pure water supply for a population of over 70,000 persons. If, however, these are to be carried out, you will have to give substantial financial assistance. I have already indicated that this assistance may be of two kinds, either direct contribution towards the cost, or a loan on easy terms, or—as in the case of India—a combination of the two. In some places where local boards exist there should be no difficulty in recovering a rate sufficient to meet the cost of maintenance and the interest on a loan, but in the case of very small towns and villages it will be found necessary to provide a great part of the original cost from general revenue, in the same way that other primarily local needs, such as bridges, are supplied. For such places large and comprehensive schemes are out of the question, but a great deal can be done by providing carefully selected and protected public wells, supplemented perhaps, in places where there is any existing local authority to supervise and insure the working, by small pumps worked by ox-gear, delivering into small elevated tanks. A very trivial rate would suffice to pay for modest schemes of this character.

Of almost, if not quite, equal importance with the provision of pure water supplies is the question of drainage. The frequency with which the assistance of Government is invoked for drainage schemes by municipalities, local boards, and gansabhwahas, indicates a lively appreciation on the part of those bodies of the necessity for sanitary measures, and I am glad to think that there is a general tendency towards improvement in this respect. Much, however, remains to be done in the way of drainage and the disposal of sewage in many towns and villages, and the subject will, I hope, continue to engage the vigilant attention of the provincial officers and the generous sympathy of the central Government.

SANITATION AND WATER SUPPLY OF COLOMBO.

I come now to a chapter in the history of the past seven years which has a special interest for the residents of the capital city, but

which is also of vital importance to the whole Colony. I refer to the sanitation and water supply of Colombo.

When I assumed charge of the administration of the Colony in February, 1896, I realized the necessity of promptly dealing with the urgent questions affecting the welfare of Colombo, and therefore of Ceylon, namely, the deficient and precarious water supply and the grave insanitary condition of the city. The prosperity of Ceylon is dependent on the prosperity of Colombo, practically its only seaport. Disastrous consequences would befall the whole Colony if Colombo were to become the home of endemic disease, and therefore what is technically called a foul port ; and, indeed, the mischief would affect Imperial as well as insular interests. Accordingly, from the very first I have regarded this question as one which should be treated, and if necessary disposed of, by the central Government, and not left, like any other question of purely municipal interest, in the hands of the Municipal Council.

Few questions during my term of office have called for such care and attention as this question of the sanitation of Colombo, both on account of its inherent complexity and of the vital importance of the interests involved, and although it will be several years before there can be much visible fruit of these difficult negotiations, it will always be a source of great satisfaction to me that the closing years of my administration have seen the inception of a work on which the future welfare of this growing city so largely depends.

THE SIMLA EXODUS.

It is a favourite argument of official apologists that the Government of India, in annually migrating to the hills, is only following the example of their Muhammadan predecessors. It is desirable therefore that the argument should be subjected to examination. Looking then into history, we find the facts to be as follows. In the first place there is no evidence that the Pathan Kings of Delhi or the other Muhammadan dynasties which preceded the Moghuls ever went to the hills. On the contrary it is clear that they never did anything of the sort. Born and bred, for the most part, in India, they remained at their capitals, with occasional excursions to the Panjab, Bengal and the Deccan. The Moghul dynasty was founded by Bābar, and he certainly never went to the hills. Native though he was of Central Asia, and keenly desirous throughout his life of recovering his lost patrimony, he yet stuck to his work and refused to budge. It was this steadfastness which distinguished him from his ancestor Timur and from other conquerors of India and which entitles him to be called a hero. As he tells us himself "not a few of my Begs and best men began to lose heart, objected to remaining in Hindustan, and even began to make preparations for their return." His favourite brother-in-arms, Khwāja Kilān, who had largely contributed to the Moghul victory and who, as Bābar says, had behaved admirably until the taking of Agra, insisted on returning and gave vent to his disgust at India in a Turki couplet. Bābar let him go and contented himself with reminding him in another verse of the disagreeables of the climate of Ghazni. Bābar's son, Humāyūn, never went to the hills and never left India till he was compelled to do so. Even when twice defeated by Sher Shah he tried hard to remain in the country and went to Scinde with the idea of establishing himself in Gujrat. Indeed what he seems to have regarded

as the paradise of countries was the steamy swamps of Bengal, for it was in Gaur that he loved to linger. Once, when he was hard pressed, he thought of going to Kashmīr, where his father's cousin was, but when he took a "Sors Alcorana" he lit upon the story of Joseph, and the mention of Joseph's well, and his courtiers persuaded him that this indicated Kashmīr which was like a well in being surrounded by a wall of mountains. So he gave up the idea. The first Muhammadan ruler to go to the hills was Akbar and he only went thrice in the course of a reign of fifty years. The first time was in 1589, when he went for the purposes of conquest, and stayed in the valley for about two months. The second time he went in 1592 in order to put down a rebellion. He returned as soon as this was accomplished, and his stay was only about six weeks. The third time was in 1597, and this perhaps was the only time when he went to Kashmīr for pleasure. On this occasion he stayed in Srinagar for three months. Altogether, his hill-residences occupied under seven months of his life. The weak and luxurious Jahangir went oftener to Kashmīr and stayed longer there. But even he seems only to have visited the valley four times in the course of his reign of twenty-two years, viz. in the 2nd, 14th, 20th and 22nd years. We associate him so much with the valley because he went there twice as Prince Selim in attendance on his father. Except the four visits to Kashmīr he seems to have only on one other occasion taken refuge in the hills during his reign, namely when he went in the 16th year to Kangra. His son Shāh Jahān apparently visited Kashmīr three times in the course of his reign of four and twenty years, his first visit having been paid in 1633, in the seventh year of his reign.

The visit of Aurangzeb to Kashmīr has become famous on account of the letters of Bernier. It took place in 1663 in the sixth year of the reign. Bernier speaks of his having resided three months in the valley, and this agrees fairly with Khāfi Khān's narrative, according to which Aurangzeb reached the borders of Kashmīr on 28 May 1663 and left it in the end of the following August. But the remarkable thing about this expedition is that it was the first and last time that Aurangzeb allowed himself to be enticed by the pleasures of Kashmīr. Apparently too, it was the only time in his reign of fifty years that he went to a hill-station. The army and the camp-followers as well as the beasts

of burden suffered great hardships on the journey; especially in the Pīr Panjab pass where, as Bernier tells us, fifteen elephants fell down the khud, and Khāfi Khān says that Aurangzeb was so grieved at the sufferings of his followers that he pronounced it to be wrong to go to such a country for the purposes of amusement and hunting, and in the absence of political reasons. I do not know what Aurangzeb's successors did, nor is it of much consequence, for Aurangzeb was the last emperor possessed of talent and endurance. What is clear is that it is a fable to assert that the Muhammadan emperors systematically spent the hot weather in the hills. And yet they were irresponsible rulers who had every temptation to self-indulgence and who could leave their capitals without causing grave dislocation to the public service!

The above remarks do not touch the question of the propriety of the Simla Exodus, and I am aware that there is a good deal to be said in favour of the movement. But surely there is something wrong and even monstrous about the custom! It can hardly be right that the plant of sovereignty should be uprooted twice every year. Were there no other reason against it, the envy and jealousy which the retreat to the hills causes to all outside the privileged circle are an objection not to be disregarded. It seems also illogical and anomalous to pay large salaries on account of the supposed unhealthiness of a country, and at the same time to grant immunity from such evil. The custom of retreating to the hills cannot, perhaps, be abrogated, but it might be modified. Might it not be made triennial or even septennial, instead of annual as at present, so as to approximate it somewhat to the practice of the Muhammadan emperors? In connection with this, might it not be advisable to lengthen the period of service of a Viceroy, or Governor? Five years is too short a time for Indian service now that one can so easily escape from the dreaded plains, and go to the hills or to Europe. Why not make ten or even twenty years the ordinary period of a Viceroyalty? This certainly would give greater stability to the government, and would lessen the number of the painful periods of learning and unlearning through which every Viceroy has to pass.

H. BEVERIDGE.

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THE
NATIONAL MAGAZINE
NEW SERIES.

NO. 8.—AUGUST, 1904.

THE ETHICS OF RANCHING.

SUPPLEMENTARY DEVELOPMENTS.

I am at the present moment embarrassed with riches. My slight literary Effort, "The Ethics of Ranching" published in the *National Magazine* has brought me both Fame and *A paying Guest!* It just remains to receive a handsome cheque from the managing Editor of the said magazine to make me a proud man. At present however I am in a sort of fool's paradise. The fame, so far, rests on a pencilled allusion to the writer on the cover of the magazine by one distinguished person resident in Calcutta to another resident in Scotland. The paying guest is still "considering" the modest bill presented on his departure for fresh fields. The *National Magazine* cheque must have been delayed by our very deficient Mofussil postal arrangements. In the meantime, to discount the whole bill, I have added a supplement to the former "study" in the shape of (supposed) extracts from "my friend's" diary.

W. R. M.

Strath Peffer—5th July 1904.—This will end them! I have just received from Calcutta a copy of the *National Magazine* containing a very interesting article on "the Ethics of Ranching." I am done with sulphur baths, and salt baths, and the whole paraphernalia of Hydropathic Establishments. The open air life of the rancher's the thing, and will make a new man of me.

6th July—I have written to the author of “Ethics of Ranching” telling him I am coming to Canada. I hope the letter will find him. I addressed it—

W. R. M.

(Late of India):

Farm-rancher

Foot hills of Alberta

Canada.

* * * * *

Winnipeg—August 21st arrived here yesterday and interviewed Mr. Obed Smith Governor Immigration agent. He *very strongly* advised me to push on to the west. I had intended to get some kind of out-door work on a farm in Manitoba, but I will act on his advice and move on to Calgary. My letter must have reached its destination by this time.

* * * * *

2nd September.—Arrived at DeWinton which, I am told, is only four miles from my “*terminus ad quem*.” But how am I to get there? I am writing this in the DeWinton Post Office—originally the entrance lobby of a small farm-house. The good woman who keeps the Post Office, a healthy looking dame of 40 or 45, is very sympathetic but can do nothing to help me as “Hughie” (her husband I presume) has the “team” away with some neighbouring mails. My ankle and neck (the parts affected by my rheumatics) are more than ordinary troublesome just at present but as I am now in a country where every one is independent of every other body’s help I must just tramp the four miles that lie between this hole of a Post office and the home of the author of “Ethics of Ranching.” In my present state of mind it looks somewhat like tracking a fox to its den.

• 3rd September—Here I am safely and comfortably housed in “Strath Pine”—a far better place in my opinion than Strath Peffer where I was just 2 months ago. But oh! what a journey from DeWinton! I shall never forget September the 2nd 1904 as long as I live. I am told it is only four miles: it seemed to me more like forty! I got over the first part of my journey all right, but as the dusk grew to darkness I began to realise what it

means to be "lost on the Prairie." I asked a young man whom I met whether I was on the right road for Mr. M's house. He kindly came with me to the edge of a steep hill and pointing down the valley he told me that the light we saw in the distance was only half a mile away and was shining in Mr. M's bed-room. "When you get to the foot of the hill follow the trail to the right till you come to a bridge, cross that and you will soon be at the house: Good night."

I began by promptly losing the trail! Keeping the bright light still in view I came to a creek which I dared not try to cross. Over and again I turned in the direction the trail ought to be and as often I found myself back to the winding stream. My stiff neck was sorely tried by constant straining after my beacon in Mr. M's window. If that light had gone out I should have had to spend my first night here sitting on the banks of that horrid water waiting for dawn. My poor ankle too was crying for rest. Fortunately I came upon the bridge at last and soon I was comfortably housed.

* * * * *

September 20th—This is a lovely spot on the banks of the Bow river and encircled by gentle slopes wooded with poplar trees. The open air life is certainly agreeing with me. One is eye to eye with nature in a place like this. I wonder how much it has cost Mr. M to put up all these buildings and to fence the land and stock the place? I think I will apply for a homestead right away.

September 23rd—Mr. M. has invited me to accompany him and his wife on a visit to his homestead twelve miles distant and that much nearer the Rockies. This will give me an insight into the details of homesteading before I venture on my own account. We start tomorrow.

* * * * *

September 25th—I have been out of sorts all day. Last evening I took a pill, as I had symptoms of a bilious attack. Medicines are very expensive here and out in the country not always available. Luckily I rescued a pill box which my hostess was about to throw away. She explained to me that she had given

her Calgary Druggist a prescription which she and her husband valued very highly. It was for a dinner pill which her revered father had used for over 30 years in Calcutta. Mr. M. when telling the Druggist this suggested that it should be called "Jubilee Pill." The druggist it seems had no means of silvering them and the pills had got all crushed into a black mass mixed with cotton wool. I took part of this "dough" and made a decent sized pill for myself by rolling it between my hands. It is probable that I have swallowed some of the cotton wool. Something at least has disagreed with me; but possibly it was the fatiguing day we had coming up here—It was certainly a terrible journey! Up hill, down dale, across bog-holes, through creeks. Mr. and Mrs. M. seemed to enjoy it all. "Eels get accustomed to skinning." They are a wonderful couple. Nothing seems to interfere with their real enjoyment of life. Washing and baking and mending and cooking are looked on as mere details of the week's pic-nic, to be varied by an hour with their fishing rod or a ramble through the woods that skirt their lovely residence.

September 26th—This has been another fatiguing day. To get an insight into the work of homesteading I accompanied my host when he set out with his axe to clear the brush preparatory to fencing his "quarter-section." The weather is perfect and the whole country-side is very pretty but the rheumatics have located in my ankle so that I was glad when my companion arrived at the spot where he decided to start operations. I lay down on the grassy slope and admired the deft way he wielded his axe.

"It is simply marvellous," thought I, "what this bracing air can do for a man." I must have fallen asleep for when I looked up again Mr. M. was sitting beside me filling his pipe.

"Taking it easy?" I said in a jocular tone.

"Yes" he replied wiping the perspiration from his brow. "It is twelve o'clock and I find the custom of the country a good one of stopping work at noon for dinner—[I must have slept a very long time; but rest, complete rest is necessary for my complaint.] We had a sandwich apiece and an apple and a cupful of cold water from a "living spring" close by. We then lay and smoked in silence.

"This is certainly lovely and picturesque," I remarked "Far from the mudding crowd and all that. But don't you think, Mr. M. you could have picked out a better quarter section to homestead on? This seems to me all brush and hill. There doesn't seem to be ten acres clear enough to plough."

"You are quite right" was the reply. There are not only quarter sections but townships I could point out, each acre of which produces two tons of hay. The land is as flat as a billiard table and could be ploughed rapidly and cheaply. You ask me why I chose this: I have asked myself the same question and have already noted the so-called defects; but still I prefer to homestead here. It is difficult to explain why. Probably you will miss the meaning of my answer when I say that such a choice comes from *the folly of culture*. You are aware, I believe, that ranching, or as you neatly put it "ranch-farming" is not the line of life I have hitherto followed. "I know that" I replied "you must have been accustomed to a very different form of life. Your education is *par excellence*."

"I hope that the rancher's life has room in it for some cultured leisure" was his reply. "If not, then it is a life fit only for a hind. Personally I believe the bucolic life connotes more than barbarism. My theory is that childhood's years should be lived in the country; early manhood in the city; and declining years again in the country. Nothing that the town life can give, and it gives much, can compensate for what is lost for all time to one whose childhood has not been spent in closest touch with nature. The *bouquet* of our best literature is lost unless we have an intimate first-hand knowledge of rural sights and sounds. The town-bred man can of course educate himself into understanding and enjoying the thousand and one allusions in literature and art, just as certain people by constant practice can avoid in polite society the pitfalls of solecism in speech and vulgarity in manners. But this is accomplished by will and brain power. It differs from the living spring of appreciation and enjoyment flowing from the heart of an educated man whose plastic years have been lived beside the stream and among the hills. This may seem a small thing to you. To me it is a thing of great importance. I cannot tell you

why any more clearly than I can tell you why I prefer this to more profitable land."

"But you are not a child, Mr. M." I interrupted feeling rather stupid. "Next in importance to a child's being reared in the country," he went on as if speaking to himself, "is the importance of early manhood being spent in the city. Where men do congregate is where man's full development is attained. There are social and civil duties devolving on every educated adult. But I must be wearying you with my monologue. I will only add that my theory of life includes a return in later life to the scenes of childhood. It need not, in fact it perhaps should not, be to the very spot where he spent his childhood, but to *God's country* where he can be, to use your own phrase, "eye to eye with nature." What charm there must be for the man of culture to retire, with his books and his memories and his knowledge of life to—where? Shall I say, to a stretch of hay-bearing prairie?"

"No I replied "but to a place like this I understand now." Mr. M. rose and went off with his axe to fell some more tough willow trees. I walked back to the bungalow. His education is truly *par excellence*.

THE NEW BYRON.

The seventh and concluding volume of Lord Byron's Poetry, in Murray's new, revised, enlarged, and illustrated edition, consists of very little poetry and a great mass of work known as Bibliography. Six volumes, previously published, contain the poems which at one time were so widely read and extolled. The present volume contains only a few *Jewel's Esprit* and Minor Poems.

The complete Byron takes up thirteen volumes. Seven we have accounted for; the other six consists of the poet's *Letters*, edited by R. E. Prothero. The seven volumes of poetry are edited by E. H. Coleridge. Both editors appear to have taken immense pains to render the edition final as well as complete. The notes are numerous and exhaustive. Every allusion is explained, every difficulty is fairly met. One thing alone is now wanting—a reprint of the poems, without notes, on thin paper and in large type. At a moderate price, a volume of this kind would probably attract a large number of readers and bring about a revival of the poet's fame.

For it appears to be true that Byron is not now the great name he once was. Men of an older generation may still be met who delight to quote him, and who linger fondly over favourite passages. But on the whole, Byron is scarcely in fashion. The higher critics of modern literature consider him second-rate. Ruskin, indeed, spoke of him as a master-spirit, and we all know how when Tennyson heard of the poet's death he wandered aimlessly over the fields murmuring, "Byron is dead!" But tastes alter with the times. Still Byron will assuredly be again what he was,—a power, an inspiration.

Of the 113 Collected Editions recorded in the Bibliography, there are fewer published in Britain than in America and the continent. The translations are 7 in French, 13 in German, 4 in

Italian, 2 in Polish, 2 in Russian, and one each in Modern Greek, Spanish, and Swedish. Selections and individual poems are not included in the above, or several other languages will have to be noted. *Cain* has been translated not only into Hebrew, but into Bohemian, Hungarian, Polish, and an "International Language." *Don Juan* has found admirers in Servian and Roumanian, among other languages. The Romaic claims *Sardanapalus*, *Manfred*, and the *Giaour*. The Polish title of *The Island* is "Wyspa czyli Chrystyan i jego towarzysz." "

In this volume the lover of Byron's poetry will find a good many of the poet's characteristic aversions. Lord Thurlow's exercises in verse are severely handled. The *Devil's Drive*, now for the first time printed in full, is the longest piece in the book, and it is good reading. Plenty of people come in for sarcastic notice. Byron evidently disliked literary work by ladies, and one of his criticisms reminds us of Fitzgerald on *Aurora Leigh*. In reply to his publisher Murray's request for a "Volume of nonsense" he writes a poetical letter concluding with,—

"Or, if you prefer the bookmaking of woman,
Take a spick and span 'Sketch' of you feminine *He-man*."

"No more *modern* poesy, I pray" he says in prose, "neither Mrs. Hewoman's nor any female or male Tadpole of poet Wordsworth's." Of Wordsworth's *Peter Bell* he decidedly disapproved. Here is a stanza from an Epilogue written on the poem :—

"It saw the 'light in ninety-eight,'
Sweet babe of one and twenty years !
And then he gives it to the nation
And deems himself of Shakespeare's peers !"

That Wordsworth really thought rather highly of his own powers is confirmed by Lamb who writes to a friend in 1808 :—"Wordsworth the great poet is coming to town ; he is to have apartments in the Mansion House. He says he does not see much difficulty in writing like Shakespeare if he had a mind to try it." Lamb adds, "It is clear that nothing is wanting but the mind." (See *Spectator*, 26th March, 1904).

Byron disliked William Pitt and Low Castlereagh. For the former he has this Epitaph :—

“ With Death doomed to grapple,
Beneath this cold slab, he
Who lied in the Chapel
Now lies in the Abbey.”

The latter has several notices but the two following Epigrams will suffice :—

“ So Castlereagh has cut his throat !—the worst
Of this is,—that *his own* was not the first.”
“ So *He* has cut his throat at last !—He ! Who ?
The man who cut his country's long ago.”

Here also we find references to his unfortunate marriage. One of several caustic epigrams must serve,—

“ This day, of all our days, has done
The worst for me and you :—
'Tis just *Six* years since we were *one*,
And *five* since we were two,”

This was written in 1820, the subject being the anniversary of his marriage.

Several poems addressed to John Murray show the excellent relations that existed between the poet and his publisher. It is to the *Letters* that one must look for a fuller knowledge of this, but here, there are verses that suggest a good deal. One poem begins—

“ Strahan, Tonson, Lintot of the times,
Patron and publisher of rhymes,
For thee the bard up Pindus climbs,
My Murray.
To thee, with hope and terror dumb,
The unfledged MS. authors come ;
Thou printest all—and sellest some—
My Murray.”

Byron's last verses are entitled (by the Editor?) “ Love and Death.” They consist of six sentimental stanzas, “addressed to no one in particular.” But our last view of Byron should be, as it is in this volume, that of the poet in his saner and better

mood,—a man facing his hard lot bravely, a hero giving to a land he loved the sacrifice of his life and his service :—

“ Tread those reviving passions down,
Unworthy manhood !—into thee
Indifferent should the smile or frown
Of Beauty be.
If thou regret'st thy yonth, *why live?*
The land of honourable death
Is here :—up to the Field, and give
Away thy breath !
Seek out—less often sought than found—
A soldier's grave, for thee the best ;
Then look around, and choose thy ground,
And take thy Rest.”

Honourable in the way he meant his death was not, but honourable it undoubtedly was.

B.

A PLEA FOR HIGHER APPOINTMENTS OF EDUCATED INDIANS IN THE PUBLIC SERVICE.

The spirit of the age is highly favourable to the realisation of those aspirations which naturally arise from the changed conditions which education has brought about and the inexhaustible natural resources of a vast continent like India. Humanity sickens at the sight of a people, whose civilisation was once unique in the history of the world, starving in the midst of plenty and allowing their natural and acquired parts to deteriorate for want of a proper field of action. Now the generous instincts of Englishmen at home are aroused in favour of the suffering people by an increased knowledge of their true condition. As the people of India have proved themselves to be law-abiding and loyal, the objection to increasing their political privileges on the ground of the safety of the Empire, will not hold water for a moment. Nothing but a straight-forward and just policy will satisfy the demands of the enquiring and liberal spirit of the age. The Government is no doubt following a just and righteous policy, but whether the time has come when a more liberal policy ought to be introduced into the present policy of Government is a question which deserves serious consideration of the ruling race. There are several reasons why the existing form of Indian Government should, in the interests of India and England alike, be made more liberal and popular. The financial crisis affords substantial evidence that the affairs of India have been far from being perfectly managed. Expenditure on Public Works, the Military expenditure, and the Home charges, have swollen to enormous proportions. Railways, canals, &c., are, no doubt, reproductive and calculated to encourage and facilitate commercial enterprise. These may be the accessories of a civilised Government, but as the necessities of life must be preferred to its luxuries, the Government ought to con-

sider that when the resources of the country are not sufficient to enable the Indian people to enjoy such luxuries, any increase of expenditure on these items only tends to increase poverty by forcing them to meet the demands of an ever-increasing taxation. India can no more afford the privilege of being governed by a highly-paid exclusive Service, and can no more pay for her gigantic system of Railways, her palatial barracks and other public buildings, than English farmers can afford to plough with race horses or the Boer ryot with elephants. The time has come for considerably reducing the Public Works and the Military and Home Charges.

The successful administration of Native States by educated natives of India, their proved ability to discharge their duties as members of Legislative Councils and of self-governing institutions, and, above all, the brilliant though few instances of natives of India acquitting themselves cleverly in the British House of Commons—all go to show that the people of India are in a position to advise the Government, if it condescends to take them into its confidence. The fact is that the Government is averse to attach weight to independent native opinion. The result of such neglect of independent counsel about momentous affairs of State, and the importation of a system of legislation and administration unsuited to the instincts and traditions of the people, can hardly prove beneficial.

If every public servant were made to feel that his prospects of advancement would be retarded or jeopardised by free indulgence in an offensive and overbearing manner towards the children of the soil, a great improvement would take place. A great many of the European public servants in India seem unable to understand that they may be firm and strong without being unpopular. A great part of the difficulties of government would be removed if Indian gentlemen were treated in India as they are always treated in England. It is prudent and expedient to adapt the form of government to the present condition of the country. Foresight is the principal merit of statesmanship. It would reflect little credit upon British statesmen if their persistence in the existing policy of the Indian Government should drift them to a state of things not

anticipated and provided for. It must not be supposed that the anticipated change will be brought about by a revolution or insurrection. Both the strength of the Government and the quiet disposition of the people are sufficient guarantees against any such contingency. The change is destined to take place not through physical but through moral and intellectual forces. The history of every civilised country is the history of its intellectual development which kings, statesmen, and legislators generally retard than hasten. However great their power, they are at best so-called representatives of the spirit of their time. Instead of being able to regulate the movement of the national mind, they themselves form the smallest part of it and, in a general view of the progress of man, are only to be regarded as actors who strut and fret their hour upon a little stage, while beyond them and on every side opinions and principles are forming which they scarcely perceive but by which alone the course of human affairs is ultimately governed.

The administrative policy of the Government of India, resulting in a monopoly of the higher offices of the State by members of the ruling class, and reducing the children of the soil to a miserable position, affords a striking evidence of the necessity of a change. The people of India are not allowed free play, and arbitrary restrictions have been placed in the way of their freely competing with Europeans. The fact that the ex-Secretary of State for India (Sir Henry Fowler), with his liberal instincts, could be prevailed upon to practically annul the resolution of the House of Commons regarding simultaneous examinations in India and England for the Indian Civil Service, goes to show, that a deliberate verdict of the great representative assembly of Britain counts for nothing against the ruling of the Indian bureaucracy. The fulfilment of the repeated pledges given by such authoritative documents as the Charter Act of 1833 and the Queen's Proclamation of 1858 may be easily put off. As a matter of fact, so far as trial has been made of Indians appointed to positions of respectability, it is freely acknowledged that they have satisfied all expectations and discharged their duties with ability and integrity. The loss to Europeans of some places in the Covenanted Service is nothing

compared to the loss of reputation of Englishmen for good faith. "I would sacrifice Gwalior or any frontier of India ten times over," said the Duke of Wellington in 1802, "in order to preserve our character for scrupulous good faith." For the sake of the fair name of England, and the honour and integrity of true Britons, the British Parliament should not abdicate its noble function of close supervision by making the Indian Government solely responsible for it. Other considerations apart, financial crisis and administrative difficulties, of which there is ample evidence, should convince the people of England that the existing system of Indian Government requires an overhaul, and that unless it is placed upon a popular and representative basis, the interests of India and England will alike suffer on account of the general impoverishment of India which is daily on the increase.

But the paramount consideration for broadening the basis of the Indian Government is that England as a civilised power should pursue a liberal policy. They should not regard her necessities, her prosperity, the welfare, progress and happiness of her people, to be the first consideration. They should not desire that India's highest interests should be sacrificed to the exigencies of party—warfare in England and the prosperity of India subordinated to the aggrandisement of a privileged class. We have too elevated an opinion of Englishmen at home, untrammelled by bureaucratic influence, to think them capable of entertaining such selfish motives. The origin of the agitation for extended political rights conducted in a constitutional, loyal, and modest spirit, is to be traced to our faith in the liberal instincts and the sense of honour and justice of the British people. We firmly believe that they will not allow mere political considerations to over-ride the superior consideration of morals. "We accept," says Mr., now, Sir, Henry Cotton, in his *New India*, "the fundamental doctrine of modern social life, the subordination of politics to morals. We claim to test our political actions by moral considerations, allowing that for the State as well as for individuals, it is the question not of rights but of duties that must take precedence. These are the new principles we have to offer in substitution of the worn-out ideas which have previously been employed. This, therefore, is our policy of the future which is

based alike on the duty of England and on the need of India,—on the devotion which is due from a strong nation to a weak and oppressed people—must be a policy of mutual self-sacrifice voluntary restitution, and disinterested moderation.”

The British Government of India should be based upon moral force. No great historical knowledge is required to recognize the truth of the statement that no empire, whatever its superiority in material force over a nation subject to its sway may be, has ever yet endured by material force alone. Reflecting upon the decline and fall of the historic empires of the world, we see that the causes of their decay and extinction lie upon the surface. They were founded upon violence; they fell because they depended upon material instead of moral force. Who that has but the most superficial knowledge of the history of the English colonies, does not know how fatal to the mother-country in every respect would have been the attempt to keep them in leading-strings? They can hold India, by moral force for all time, while to contemplate the holding of it by any other means is treason against the human race. Rome tried it and failed. Green's History of England contains a vivid description of how the wealth of the subject race grew, and how everything disappeared as a dream when the central despotism of Rome ran rampant. He describes how the Romans had forgotten to fight for their country when they forgot how to govern it and tried to govern it under a system that crushed all local independence and all local vigour.

English officials in India are swayed by two and only two restraining influences; one is a sense of duty and the other is the avoidance of disturbance. There can be no doubt that the sense of duty (combined with the dis-inclination to excite tumult) operates largely and effectively in the breast of Indian officials, or things would long ago have been much worse than they are. Unfortunately, ideas of duty vary and it cannot be desirable that interested parties alone should be the sole judges of the course which duty prescribes. This fact discloses the serious defect in the system under which India is governed. No effective checking or controlling power exists except the cumbersome and over-burdened Houses of Parliament. Mr.

Disraeli foresaw the danger and sought to reduce it by instituting a really governing council in England, half of whom were to be non-officials. He was not permitted to place this check on officialdom, and thus the Empire of India has been left to the control of temporary proconsuls, who, though well-meaning and bent upon doing substantial good to the people, can hardly afford to give practical shape to their schemes of reforms for want of time and proper opportunities.

K. C. K.

ON THE INTERPRETATION OF THE VEDAS.

II.

"All was God like or God—Jean Paul still finds it so."

In olden times in India heroes appeared from time to time as they have done in all other countries, and they talked and acted. These were of different shapes and forms—Divinity, Prophet, Poet, Priest and King. Whether the Hero appeared as a man of Letters in those ages of which we have no recognised history can be disputed but for the rest, they appeared at different epochs and in various other characters too, whether recognised or not. We said the Heroes talked and acted : Yes,—they did; and did so with very great effect. They were the leaders of men, these great ones; the modellers, patterns, and in a wide sense creators of whatsoever the general mass of men contrived to do or to attain. The songs of these heroes, were collected and formed into books, and these were the Vedas. The Hero appeared and in course of time passed away under the laws of the Almighty and when the Hero disappeared, Time appeared with his axe, and gradually moulded down and diminished the virtue of the songs until the whole song was lost to future generations. When the virtue of a song was thus lost, the song itself was lost also; the meaning of the words, the construction of the phrases,—everything in fact concerning the hero and his song was gradually forgotten and the Hero in the distant future, now, is quite forgotten. This has been the Fate of many Heroes,—and their Songs have become unmeaning—the language in which the Heroes talked being gradually forgotten. Is there any means of recovering this said language, the meaning of the words and phrases and the accent, the stress, which any of these heroes placed on any portion of his Song? These can not be revived! The truth that was in that man and in the words of his Song—they have passed away for ever! It was very long ago, that this happened, earlier than the old old professor who himself belonged to the race of the seers and this old old man

In the very early childhood of Hindoo Society foresaw things—veritable truths : and mourning over the ravages which Time had done, collected and put into shape the results of the endeavours that had been made previous to his time to trace out the truths in these old Songs and he collected the traditions regarding them. He was a great man—this ; with very clear perception of facts and truths. He had great Truth in him, detested falsity and endeavoured to trace great Truths in the words of the Heroes he admired. The Hero worshipper is no less a Hero to me, than the Hero whom that man worshipped. We said, the Muni Yaska admired 'Heroes and Heroic words and he through this reverence and worshipful submission to Truth partly succeeded in arriving at the Truths which previous Heroes had declared in Song. Long ages had elapsed governed by Falsity, Hierarchical Priestless Prophetless altogether un-Heroic ages between this man and the very last Hero whom he tried to understand and he divested himself of all un Heroisms, of all false "*isms*" whatever and took courage and fought and succeeded and aftertimes bent down in respectful submission and kissed the ground before him. He saw Truths in Vedic Riks and he tried to explain them. He saw that it was about time that the Hero as Prophet Poet and such like would cease to appear. He saw that the old Rishis *were* Heroes সাক্ষাৎ কৃত ধৰ্ম্মাণঃ ঋষয়ঃ বভূবুঃ which ought to be rendered in English as follows:—The Rishis were persons who *saw* Truth ; but in after times these Seers disappeared and these truths were taught by their followers and descended from one to another until it so happened that the last man who recited the same old Song knew not the Virtue that lay therein, nor the Truth that lay in it and Yaska struck out the fire and all was ablaze round him. We have no history of the fights he fought ; but imagine a race governed by priestlessness and no-religion, apparently guided by dead forms which could not possibly guide—an age of revolution—what obstacles there must have been for the Hero Yaska to have over come ! The present times are greatly calling for another Yaska and the times will be saved if he appears ! The sacred texts must needs be explained. The Hero has appeared as the Spirit of Enquiry some say. It may be, that he is in an early stage of appearance but we do not recognise him yet. To us, the Hero in infancy is not yet a Hero.

Why is the present time crying very loudly for such a Hero as this one? There is one reason and a great reason too ; viz, that we are about to die. To die the death, is no pleasant thing for man or beast. We all strive to live and yearn for the elixir which will give us health, and ease. We feel the approaching death in all our surroundings ; the forms of religion—unmeaning effete things with no truth or only with faint traces of a very remote truth which do us little good. But there is one thing, which cheers us viz that we have yet an inherent faith in that Great Book wherein is compiled songs of Truths Divine which that learned Muni Yaska traced. We are situated so far from the times when those Heroes talked or sang that we have entirely forgotten the language in which those Truths were embodied and the words and the sounds have all lost their meaning to us. We must live, and live by the word on which our fathers lived. The truth that is there—we must have it ; cost it what it may !

We in our daily life in the performance of religious rites recite words and songs which have no meaning to us ; which to us are dead stagnant things effete and may be harmful. We recite in our religious rites the Dadhikra verse but why that verse should be sung or uttered for the purposes directed in the liturgy is unknown to us. A Yaska is needed—The times, the circumstances do call loudly for him, but he comes not.

দধিক্রাব্ণো অকারিষ জিষ্ণোরশ্বশ্র বাজিনঃ ।

সুৱন্তিনোমুখাকল্পং প্রণআয়ুঃষিতারিষৎ ॥

All Brahmanas know on what occasion this verse is sung by the priests performing rites for Saman Brahmanas. The liturgist Bhavadeva directs that this verse should be used for purifying certain articles by touch of the curd ; but the question remains whether this verse sings the praises of that particular thing. The learned Acharyya Sayana believes that this verse refers to a particular fire. But see the 14th Paragraph Section I of the Nighantu which takes together as synonyms the following words :—

অত্যাঃ । হৱঃ । অবৰ্ণা । বাজী । সপ্তিঃ । বহ্নিঃ । দধিক্রাঃ । দধিক্রাবা । এতথঃ ।
এতশঃ । পৈষঃ । দৌৰ্গহঃ । উচৈশ্রবসঃ । তাক্ক্যঃ । আশুঃ । ব্রহ্মঃ । অরুযঃ ।
মাংসচ্ছঃ । অব্যথয়ঃ । শ্বনারঃ । সুপর্ণাঃ । পতঙ্গাঃ । নৱঃ । হ্বাৰ্ঘানাম্ । হংসাসঃ ।
অশ্বা ইতি ষড়্বিংশতিরশ্বনামানি ॥

This classification we have quoted above is very much older than the said Muni Yaska, and was made at a time when the words quoted above were still being used in their older sense. For, what does the word अश्व mean in Vedic Sanskrit? Does it actually and always mean the horse? This can well be doubted. We should suppose that at this early stage of literature, words were used in their primitive sense. Etymologists derive the word "asva" from the root "ash" (अश্ from বাপ্তোতি মার্গমিতি । অশ্ বাপ্তো) which denotes the faculty of movement—covering space by speed, and anything which has this faculty is an asva (अश्व) and the synonyms of this word have also been quoted. In modern times open the standard vocabulary of modern Sanskrit and the modern synonyms are there given as follows পীতিঃ পীতী । বীতিঃ । ষোটকঃ । ষোটঃ । তুরঙ্গঃ । তুরগঃ । তুরঙ্গমঃ । বাজা । বাহঃ । অর্কঃ । গজর্কঃ । হরঃ । সৈন্ধবঃ । সপ্তিঃ from which list it appears that some of the old Vedic words which meant any thing having the quality of speed came to mean a particular class of animals viz the horse and that the rest are only secondary derivatives from verbs which mean fast movement. Thus in old Vedic, the word 'asva' might mean the flash of thunderous lightning in the heavens, or the speed of the maned horse, or the fast bounding stream ; and it might have also meant 'the Flash' the gleam of any Fire. The word দধিক্রাবা in this verse might have therefore meant the fitful gleam of a bonfire, or the flash of lightning in the heavens, and so on. The said Muni Yaska has, although not in connexion with this verse but else where, interpreted the word দধিক্রাবা to mean fire or the horse :

অশ্বনামান্যন্তরাণি সঙ্কিশতিঃ । তেষামষ্টী উত্তরাণি বহুবৎ । অশ্বঃ কন্দাদগ্নুতেহ-
শ্বানং মহাগনো ভবতীতি বা । তত্র দধিক্রা ইত্যেতদ্ দধৎক্রামতীতি বা দধৎক্রন্দতীতি
বা দধদাকারী ভবতীতি বা তস্য অশ্ববদ্ দেবতাবচ্চ নিগমা ভবন্তি তত্ৰদ্ দেবতাবহ-
পরিষ্ঠাতদ্ ব্যাখ্যাত্যামোহৈথৈতদশ্ববৎ ॥

And again as follows :—

দধিক্রা ব্যাখ্যাতঃ । তত্ৰৈত্যা বা ভবতি ॥

আ দধিক্রাঃ শবসা পঞ্চ কুপ্তীঃ ইব জ্যোতিষাপস্ততান ।

সহস্রশাঃ শতসা বাজার্বা পূণক্তু মধ্বা সমিমা বচাংসি ॥

অতনোতি দধিক্রাঃ শবসা বলেনাপঃ সূর্যা ইব জ্যোতিষা পঞ্চ মনুষ্যজাতানি
সহস্রশাঃ শতসা বাজী রেজনবানবেরণবান্ৎসংপূণক্তু নো মধুনোদকেন বচনাগীমানি
ইতি । মধুশমতেবিপরীতত ॥

And Acharyya Sayana has also interpreted the word as Fire.

অথ সপ্তমী। বামদেব ঋষিঃ। দধিক্রাবাহ্নিবিশেষঃ। “স চান্বরূপঃ অগ্নি-
দেবৈভ্যোনিলীয়ত অথো রূপং কৃত্বা বদন্তেত্যতিষ্ঠৎ”—ইত্যাদি অধ্বৰ্য্যবাক্ষণমনুসংস্কায়াম্।
দধিক্রাব্ণো দেবন্ত স্তুতিম্ অকারিষ্যং করবাণি। জিহ্বোঃ জয়শীলন্ত অশন্ত। বাজিনো
বেগবতঃ। স দেবো নোহস্মাকং মুখামুখানি চক্ষুরাদীনীজিহ্বাণি স্মরতিস্মরতীনি করং
করোতু। নোহস্মভ্যম্ আয়ুংষি প্রতারণং প্রবর্দ্ধয়ন্ত প্র পূর্বস্তিরতিবর্দ্ধনার্থঃ ॥

দধিক্রাবা is here taken to mean a particular class of fire and a tradition is quoted from a book older than the commentator which relates how that the fire once appeared in the form of a horse. There can be no doubt in our minds as to the origin of this tradition but that is not the subject we have to discuss now. We said that this verse quoted above is at the present day used to purify a thing by touch of the curd which is presumed to be, by itself, a sacred thing. If Professor Sayana's traditionary interpretation is correct, then apparently this verse had no concern with the curd দধি or any thing of its nature or kind what so ever. What is Sayana's idea of the meaning of this verse? Our rendering of Sayana's gloss will be as follows *viz* ;—That this verse is a prayer to the God of Flames,—the Fire,—and the devotee prays that this God may grant sweet face and a long life. But this learned Professor is known not to belong to the class of Sama Brahmanas nor does he seem to have noticed the position of this verse in the Sama Veda. The Rishi who arranged the Sama Veda surely never considered that this verse ever referred to the Flame of Fire or the speed of the Horse. This man's conception of the verse led him to class it with the verses by which the Great Indra was praised or worshipped, and this was surely the older tradition and the conception which more nearly approached the primitive idea of this verse. We believe also, that the Rishi who collected the Sama Veda must have known an earlier tradition than the one referred to by Sayana, which earlier tradition must have explained this verse as referring to the Great Indra; and still more, the very fact that there is a Sama attached to this verse denotes undeniably that this verse was in earlier times actually sung in praise of the great, the Heroic Indra. The Saman belonging to this verse has been placed along with those Samans by which Indra was praised or worshipped and we cannot now deny nor could Professor

Sayana could possibly deny that this verse is a prayer to Indra. This verse, we can well imagine, was *Seen* :—and at a very early stage of Humanity. It was seen, at a time when the Seer could describe objects only by a series of qualifying adjectives—had, in fact, no substantives as names of particular objects. There is the fact that in very early times, this verse was considered as worshipping Indra,—the Great Odin. Is not Scandinavian Odin, the same as Indian Indra, with climatic differences of character? Hence our conception of this verse will be that it is a prayer to Indra who is qualified as दधिक्रावा, जिह्व, अश्व, बाजी : Indra in the conception of those early seers was दधिक्रावा the Great Rider जिह्व the conquering Hero, अश्व filling the earth and sky बाजी swift as lightning,—adjectives for the Great God of Heaven. This Divinity—the God of those Seers—is worshipped and they pray and sing so that He may make them strong and beautiful and grant them long lives. Sayana's conception of the verse is inadequate and we must say incoherent. When the Seers saw this verse, they *saw* Indra the Strong, the Swift, the Powerful. How could they at this moment in their ardent souls bounding with enthusiasm and freshness of thought pray to make their faces sweet smelling? Absurd!—We should say Surabhi is graceful, or we may say with more truth *sweet* ;—sweet to the taste, sweet to the touch, sweet to the eyes ;—they could not yet discern philosophically the different nature of the pleasures of the different senses. They say sweet and everything that appeals to the different senses as sweet is included in it. Mukha,* is the whole body not the face or the mouth only. Our conception of this verse therefore stands thus *viz* that the Seer seeing the Great God of Heaven as the strong, the swift, the conqueror, prays to him for a body as strong as swift as the God is and asks that he may enjoy long life.

Assuming then, that the above conception or any other conception of this Verse is correct, the question remains how that this Verse was ever directed to be used in the way described above. Dead liturgy—taking away the sap of all life! We can still recite this verse and knowing how our forefathers *read* it, can we not inspire ourselves and invoke the Great God of

* Cf. The use of the Hindi word Badan (बदन) ।

Heaven in that Form again and, to crown all, imbibe that freshness of Soul which enabled them to conquer and govern not only man and beast but all forces of nature besides? Liturgy! Look at the TandyaMaha Brahmana,* the book which guided Saman Priests in their ceremonies. This said Verse is explained there and the usage described—but to what use, end or benefit? It reads as follows:—

দ্রাহারণঃ, অগ্নীদ্রীং গচ্ছা দধিভক্ষং ভক্ষয়েয়ুঃসমুপহুয় দধিক্রাবু ইতি, অত্র যত্ৰপ্যস্মিন্ মন্ত্রে দধিক্রাবুতি অশ্বরূপো? যিবিশেষ এব দেবতাভ্যেনাভিধীয়তে, তথাপি দধিভক্ষযোগাৎ সামান্তেন দধিভক্ষণে বিনিয়োগ ইতি দৃষ্টব্যং। পাঠস্ত, দধিক্রাবণো অকারিষজিষ্ণোরশ্বস্ত বাজিনঃ সুরতি নো মুখা করংপ্রান আয়ুংষি তারিষৎ ॥

দধি দধিভক্ষয়ন্তু ক্রামতীতি দধিক্রাবা ক্রমেব নিষি বিড়নোরনুনাগিকঃ স্তাদিতি মকর-সাকারঃ, তস্য দধিক্রাবু এতৎ সংজ্ঞকস্যাশ্বরূপস্য দেবস্য অকারিষং পরিরক্ষণং কৃতবানস্মি কীদৃশস্ত জিষ্ণো র্জরশীলস্ত বাজিনো বেগবতো বাজিনবতো বা অশ্বস্ত অন্নোতেরশ্বঃ কিপ্রং সর্কং ব্যাপ্তবতঃ স চ দধিক্রাবা দেবঃ সুরতি স্পাংসুলুগিতি শেলুক্ সুরভীনি স্পগন্ধানি নোহস্মাকং মুখা মুখানি কঃ কয়েতু নোহস্মাকং আয়ুংষি প্রতারিষৎ ॥

The above text is probably the earliest or at least one of the earliest directions to use the Verse with reference to the curd and the plea that is urged in defence of such an absurd use is দধিভক্ষ যোগাৎ সামান্তেন দধিভক্ষণে বিনিয়োগঃ that is this Verse should be used in drinking curd as the word দধি (Dadhi) the Sanskrit word for the curd is used in this Verse. Consider the rank absurdity of such a direction and after times have followed this and such others and the stillness of death has gradually settled upon society. Modern times will not bear such jargon—they do call very loudly for a Hero.

Take another verse which will this day and all other days be read with some reverence by millions of people in India in the performance of Sraddhas and under other circumstances.

ইদং বিষ্ণুর্বিচক্রে ত্রেখা নিদধে পদং সমুচ্যমস্ত পাংস্তলে ॥

This verse was taken up by the said Muni Yaska for explanation and he explains it as follows:—

যদিদং কিং চ তদ্বিক্রমতে বিষ্ণুস্ত্রিখা নিদধে পদং ত্রেখাভাবায় পৃথিব্যামস্তুরিকৈ দিবীতি শাকপুণিঃ। সমারোহনে বিষ্ণুপদে গয়শিরসীতোর্ধ্বেভাবঃ। সমুচ্যমস্ত পাংস্তলে প্যায়নেহস্তুরিকৈ পদং ন দৃশ্যতে। অপি বোপমার্থে স্তাৎ সমুচ্যমস্ত পাংস্তল ইব পদং ন

দৃশ্যতে ইতি। পাংসবঃ পাদৈঃ স্ত্রস্ত ইতি বা পদাঃ শেরস্ত ইতি বা পংসনীয়া ভবন্তীতি
বা ॥

Vishnu strode over all this Universe ; thrice he plants his foot. This he does in order to his threefold existence 'on earth, in the atmosphere, and in the sky' says Sakapuni. 'At his rising, in the Zenith, and at his setting,' says Aurnavabha.

To which Pandit Durgacharyya adds as follows :—

বিষ্ণুবাদিতাঃ 'কথমিতি যত আহ ত্রেখা নিদধে পদং নিধন্তে পদং নিধানং পদৈঃ।
ক তত্র তাবৎ পৃথিব্যামন্তরিক্ষে দিবি ইতি শাকপুণিঃ। পার্থিবোহগ্নিভূত্বা পৃথিব্যাং
যৎ কিঞ্চিদন্তি তদ্বিক্রমতে তদধিতিষ্ঠতি অন্তরিক্ষে বৈদ্রাতাশ্চনা দিবি সূর্যাস্থনা যদন্তম্
তস্ম অকুশলং ত্রেখা ভূবেকম্। সমারোহনে উদয়াগরাবুদয়ন্ পদমেকং নিধন্তে বিষ্ণুপদে
মধ্যান্দিনে অন্তরিক্ষে গয়শিরসি অন্তংগিরাবিত্তি ঔর্ণভাব আচার্যো যন্ততে।

Vishnu is the sun. How? Because he says 'thrice he planted his foot! Where did he do so? On the Earth, in the firmament, and in the heaven, says Sakapuni. Becoming terrestrial fire, he paces or resides a little upon the earth, in the shape of lightning in the firmament, and in the form of the sun in heaven. As it is said they made him to exist in a threefold form. Aurnabhava acharyya thinks the meaning is, He plants one step in the Samarohana (point of ascension) when rising over the Eastern Mountain, (another) at noon on the Vishnupada, the meridian sky, (a third) on Gayasiras, when setting beneath the western hill

Next, we have Sayanacharyya's explanation of this verse :—

অথ নবমী। মেধাতিথিঃ। বিষ্ণুঃ ত্রিবিক্রমাবতারধারী। ইদম্ প্রতীয়
মানং সর্গং জগৎ উদ্ভিষ্ট বিচক্রে বিশেষণ ক্রমঃ কৃতবান্। তদা। ত্রেখা ত্রিতিঃ
প্রকারৈঃ। পদং নিদধে স্বকীয়ং পাদং প্রক্ষিপ্তবান্। অন্ত বিষ্ণোঃ। পাংস্বলে
পাংস্বরে ধূলিস্বক্তে পাদস্থানে। সমুচ্চম্ ইদম্ সর্বং জগৎ সমাপত্তভূতম্।

Vishnu plants his foot in the Universe in three ways. In the foot of dust (mist ?) the whole world is carefully kept. After explaining the verse in his own way, Sayana adds Yaska's explanation of it.

We sit here wondering at the work of time, which gives us five different explanations of this verse but none of which refer to a very important text in Valakhilya viz.

যদন্তম্ বিষ্ণুস্তীণি পদা বিচক্রে উপ বিজ্ঞাত ধর্মতিঃ।

For whom Vishnu strode three paces as a friend.

There is also a Saman to this verse and it appears twice in the Sama Veda; once in the first and again in the second portion. And we read it there as a prayer to Indra but is called technically the Saman of Vishnu. We can well compare this verse with another in the Purusha-Sukta.

ত্রিপাদুর্দ্ধউদৈত পুরুষঃ পাদোত্তোহাভবৎপুনঃ ।

তথা বিষ্ণুং ব্যাক্রামদশনানশনে অভি ॥

অথ চতুর্থী। সোহয়ং ত্রিপাৎ পুরুষঃ সংসারস্পর্শরহিতঃ বহুলস্বরূপ সোহয়ং উর্দ্ধ উদৈৎ অস্মাদতোনকার্য্যং সংসারাহিভূতঃ সন্ তত্র তৈশ্চুর্ণ দোবৈষ্পৃষ্টঃ উৎকর্ষণে স্থিতবান্। অশ্ব সোহয়ং পাদঃ লেশঃ সোহয়ং ইহ মায়ায়াং পুনরভবৎ সৃষ্টিসংহারাত্যাং পুনঃ পুন রাগচ্ছদিতি (অশ্ব সর্বস্ত জগতঃ পরমাত্মলেশত্বং ভগবতাপ্যুক্তম্ “বিষ্টভ্যাহ-
মিদং কৃৎস্ন মেকাংশেন স্থিতো জগৎ “ইতি) তথা মায়ায়ামাগত্য অনন্তরং বিষ্ণুং দেবতি-
র্থাগাদিক্রমেণ বিবিধঃ সন্ ব্যাক্রামৎ ব্যাপ্তবান্। কিং কৃত্বা ? অশনানশনে অভি লক্ষ্য
অশনং ভোজনাদি ব্যবহারো পেতং চেতনং প্রাণিজাতং অনশনং তদ্রহিত মচেতনং গিরি-
নদ্যাদিকং। তদ্রূপত্বা যথা স্ত্রীত্বা অয়মেব বিবিধো ভূত্বা ব্যাপ্তবা নিত্যার্থঃ ॥

The words of the Rik, to our minds mean that That being repeatedly plants his foot. He takes three strides and here is one. In this way he traversed the Universe including both the animate and inanimate. But Sayana's gloss gives it a different aspect—ত্রিপাৎ পুরুষঃ is explained by him as He who appears in a variety of Forms and is not affected by the touch of the world. উর্দ্ধ উদৈৎ Being devoid of the darkness which affects the world, remained high. This Being appears again and again in this Universe within this darkness and pervades the world, both animate and inanimate. We observe a similarity of conception between this one and the Saman of Vishnu. Nor do we fail to trace a similar idea in the verse which follows this one.

পুরুষ এবৈদং সর্বং যদভূতং যচ্চ ভাব্যম্।

পাদোত্ত সর্বা ভূতানি ত্রিপাদস্তাত্মতন্দিবি ॥

We also observe how in later days the theory of the three strides has been explained in traditionary legend.

শ্রদ্ধাশ্চ মেধৈর্ধজমানমুর্জিতং
 বলিং ভৃগুণামুপকল্পিতৈস্ততঃ ।
 জগাম তত্রাখিলসারসন্ততো
 ভারেন গাং সন্নময়ন্ পদে পদে ॥

শ্রীভগবানুবাচ ॥

তস্মাৎ হস্তো মহীগীষদ্ বৃণেহহং বরদর্ষভাৎ ।
 পদানি ত্রীণি দৈত্যেন্দ্র সংমিতানি পদা মম ॥
 নান্যৎ তে কাময়ে রাজন্ বদান্যাজ্জ গদীশ্বরাত্ ।
 নৈনঃ প্রাপ্নোতি বৈ বিদ্বান্ যাবদর্থপ্রতিগ্রহঃ ॥

শ্রীশুকউবাচ ।

এষ বৈরোচনে সাক্ষাদ্ ভগবান্ বিষ্ণুরব্যয়ঃ ।
 কশ্যপাদদি তেজ্ঞাতো দেবানাং কার্যসাধকঃ ॥

এষ তে স্থান মৈশ্বর্য্যং শ্রিয়ং তেজো যশঃ শ্রুতম্ ।
 দাস্ত্যত্য়চ্ছিত্ত শক্রায় মায়ামাণবকো হরিঃ ॥
 ত্রিভিঃ ক্রমৈরিমান্লোকান্ বিশ্বকামঃ ক্রমিশ্রুতি ।
 সর্ব্বস্বং বিশ্ববে দত্ত্বা মুঢ় বর্দ্ধিষ্যসে কথং ॥
 ক্রমতো গাং পদৈকেন দ্বিতীয়েন দিবং বিভোঃ ।
 ঋক্ কায়েন মহতা তাত্তীয়শ্চ কুতো গতিঃ ॥

শ্রীশুকউবাচ ॥

বামনায় দদা বেনা মর্চ্চি হোদকপূর্ব্বকম্ ॥

মধুব্রতপ্রথনমালয়া বৃত্তো
 ররাজ রাজন্ ভগবানুরুক্রমঃ
 ক্ষিতিং পদৈকেন বলের্ব্বিচক্রে
 নভঃ শরীরেণ দিশশ্চ বাহুভিঃ ॥

পদং দ্বিতীয়ং ক্রমতস্ত্রিবিধং পং
 ন'বৈ তৃতীয়ায় তদীয়মণুপি ।
 উরুক্রমস্তাজ্জিহ্বরূপৰ্য্যুপৰ্য্যথো
 মহর্জনাভ্যাং তপসঃ পরং গতঃ ॥

What can we infer from all these texts and commentaries taken together?—To us that is easy to discover. All these are as equally in the dark about the meaning of the word 'three' as we are ; situated so remote from the age in which the word was first used. But let us divest ourselves of all formulas and we at once find that one of the Heroes discovered three different aspects of nature and He discovered further that there was one Great Thing—call it Thing or what you will—which had three remarkably different aspects. "Three," to him, might have signified,—Morning noon and darkness ;—Peace, activity quarrel—calm, a strong blast, and a violent storm—Normal Temperature Excessive Heat and Excessive Cold. This particular Hero discovered the fact that there are three aspects in one and the great only divinity which you might call Indra or Vishnu or the Sun. There is a simple meaning which appears to us to be *the* meaning of that Hero who discovered this verse. He finds that all is God like 'or God—and further he discovers in three aspects of Nature—and proclaims to his people the fact that all that you discover in the three forms of nature are Godlike or God ; and that beyond this all is dark. A great thing for us to learn and observe that beside the fact that everything is Godlike, we can have no other knowledge. I believe the Puranas give a truer explanation of the Vedic Hymns than the commentators—the dead Etymologists and liturgists,—Do not these times call for a Hero? This, too, is not a conception got up in modern times for look at other texts of the Vedas.

• ত্রীণি মিথুনানি তাশ্বেষ*

The 'three' is here explained as Agni, Vayu and Aditya.

“অগ্নি বায়াদিত্যাস্ত্রয়ো গন্ধর্বাঃ পুরুষা লোকত্রয়েহপি উষসো যোষিত-
 স্তগ্নিলিতেন ত্রীণি মিথুনানি ভবন্তি ॥”

Consider again the text.

অথৈষা দ্বি দেবত্যা ত্রিরূপা ব্রহ্মণো দে তৃতীয়ে তৃতীয় ময়ীধঃ ॥

শুরু কৃষ্ণ লোহিত বর্ণা ত্রিরূপা চ তেষু ত্রিরূপেষু শুরুঃ রূপমিতরা
পেক্ষয়া তথা কৃষ্ণ মপি দ্বিতীয়ং রোহিতমপি তৃতীয়ং ।

The Hero we said discovered or rather saw that the number three truly and completely represents the diversities of nature and the people round him answered Yes Even so! The number three—the first number recognised—was at once a sacred fact to the said Hero, and his people and they had three, thirty-three, and thirty-three crores of God because all was Godlike or God and all to them was sacred! Verily, we need a Hero to divulge the mysteries in the Vedic Hymns.

*ADMINISTRATION OF THE AFFAIRS OF CEYLON,
1896-1903.*

[EXTRACT FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW.]

VI.

THE PLAGUE.

I come now to the subject of plague. It is a matter for lively congratulation and profound thankfulness that this fortunate Island has remained wholly immune from the ravages of the terrible scourge which has raged so pitilessly in India and elsewhere on all sides. When I tell you that in Bombay city alone over 100,000 deaths from plague have occurred since 1898, you may realize with what relief I am able to present to you to-day a clean sheet on which not a single outbreak of plague has to be recorded. This satisfactory state of affairs may be put down to a combination of many causes : first, that Colombo is not a terminal port ; second that vessels do not come alongside any pier ; third that vessels and their crews coming from infected ports are thoroughly inspected before leaving ; fourth, that the Plague Committee is fully alive to its greatest responsibilities ; fifth, to the good work performed by the port surgeons ; and last, but not least, to some natural cause, climatic or other, which science has not yet fathomed.

But we are justified in ascribing our immunity very largely to the elaborate and careful precautions which have been incessantly observed during the last six years, and it is desirable that I should remind you of these precautions, and at the same time utter a final warning against their relaxation to any material extent.

To sum up : the plague, lamentable and disastrous as its results have been elsewhere, has done us this good.—it has been the means of introducing wholesale and much-needed reformation in the system of dealing with infectious diseases, and this has saved many lives and will save many more. When the prevalence of plague in

Bombay rendered it necessary to consider very carefully the best means of protecting this Island, the inadequacy of the system then in force became at once apparent. The introduction of the plague would not only cause great loss of life, but, situated as Ceylon is, would entail results fatal to its commercial prosperity. No expenditure can be too great, no precautionary measures too elaborate, if they have the effect of averting this terrible disaster. Money has not been grudged, and the thanks of the community are specially due to the members of the Plague Committee, who have performed their important labours with unremitting diligence and vigilance.

IMMIGRATION AND LABOUR SUPPLY.

Our precautions against plague are necessarily inseparably connected with the question of cooly immigration, and it is to this vitally important subject that I would accordingly next invite public attention. A plentiful labour supply is essential to the success of the planting industry, on which the prosperity of the Colony mainly depends—indeed, without immigrant coolies the industry would perish. It is therefore a matter which has always received the most careful attention of Government, and it is interesting to note the progress which has been made since 1896. When I arrived in Ceylon there were three ways by which the cooly could travel from India to the estates. He could come by Paumben, Mannar and the North road, or by Tuticorin and Colombo, or by Aminapatam, Tondi, and Colombo. By the first route the coolies were conveyed in Government vessels from Paumben to Mannar at a cost of a rupee each; from Mannar they travelled by road to Matale, a distance of a hundred and thirty-one miles. There, as a rule, they took the train, but in some instances they had not money to pay for tickets, and walked to their estates. Along the North road sheds were provided for the accommodation of the coolies, and wells were constructed which yielded an ample supply of water, while at Dambulla a hospital was provided for the treatment of the sick. The Mannar route was for many years generally adopted, first, because it was the best known, and coolies are extremely conservative in their habits; secondly, because it was the cheapest. The road-journey cost nothing the men carried their own stores of provisions, and their passage to Mannar only cost a rupee, whereas the fare on a steamer to Colombo would come to three or four rupees. Matale would also in most cases be nearer

the coolies' destination than Colombo, and less train fare would have to be paid.

Until 1897 the steamers from Tondi and Ammapatam were very irregular, depending more on cargo than on passengers. By slow degrees, however, the steamer route increased in popularity, and gradually special arrangements were made for the reception of the coolies. At first they travelled as ordinary passengers, landing at the passenger jetty and taking their tickets at the Colombo station. After some time, however, the inconvenience of this began to be felt. The coolies were therefore landed at the root of the breakwater, as now, and a depot was established at Kelaniya. It consisted of two or three small buildings with a kitchen and latrines, but could not accommodate more than a hundred men. To this the men were at first sent on foot in charge of a guard, but in 1892 a further improvement was made by despatching the men to the depot in special trains. If they failed to catch the up-country train they remained the night at Kelaniya.

As for quarantine in the harbour, very insufficient arrangements were made. As far as I have been able to ascertain, no special precautions were taken even when cholera was raging in the district from which the coolies came. If no case had actually occurred on board, the men were allowed to land after examination (a mere examination in such cases is almost useless) and to proceed to their destinations, whether Colombo or up-country, without restriction of any kind. When a case occurred on board a vessel which disembarked its passengers at Colombo she was quarantined for such time as the port surgeon thought necessary, the coolies and other passengers being fed on board by the ship's agents. At Mannar the coolies were apparently allowed to proceed on their journey without any special inquiry.

These then, briefly, were the arrangements which existed in 1895 and 1896. and had they remained unaltered, there can be little doubt but that severe outbreaks of cholera must have occurred in the Island. It is more than probable, indeed, that plague itself would have been introduced. The Mannar route acted as a species of natural quarantine in protecting the planting districts, but the bulk of the coolies came by Colombo even when the North road was open. In 1896, for instance, twice as many came by Colombo as by Mannar, in 1897 three times, and in 1898 nearly four times as

many. The depot at Kelaniya was in every way unsuited for the reception of coolies. It was very small; it was situated in a densely crowded suburb; isolation or segregation was impossible: there was no way of preventing the members of an infected gang from getting into Colombo or up-country; even if the men remained at the depot, they were almost certain to convey the disease into the neighbouring localities, where it was extremely difficult to deal with it. In point of fact, when the number of coolies exceeded the very limited accommodation provided for them they used to quarter themselves in the houses of the adjoining villagers, paying a trifling sum for the night's lodging, and in this way the area occupied by possibly infected coolies might be very considerable.

I appointed a Commission to inquire into the feasibility of establishing a quarantine station in Dutch island, but the conclusion arrived at was that the scheme was impracticable until Puttlam was connected by railway with Kurunegala and Anuradhapura. Hare island in the port of Tuticorin was proposed as quarantine station, but after communicating with the Madras Government I was convinced that the suggestion was impracticable. A very brief inquiry made it apparent that the Kelaniya depot must be abandoned and accordingly, in July, 1897, I appointed a committee to go up the railway and select a new site. Ragama was selected as the most accessible place in which the necessary accommodation could be found. The place afforded great facilities for rail transport, as it was within a short distance of Ragama that the line which runs to the quarry which supplies the harbour works with stones branches off. Consequently, there are no fewer than ten trains in the day running each way between Colombo and Ragama. There was, moreover, a large extent of land available, partly jungle, partly planted, and an abundant supply of excellent water. The first camp was made on a hill overlooking the railway station on a site formerly occupied by a resthouse. A hospital was also built a short distance from the camp, and bathing-places, kitchens, latrines, and other necessary arrangements were provided. When the plague broke out, a second camp was constructed at the junction of the main with the quarry line.

The question of closing the North road became the next subject for consideration, and after much discussion I decided to adopt this course, even at the risk of interfering to a certain extent with the

labour supply. I felt that it was impossible, with due regard to the safety of the Island, to treat plague as cholera had been treated, mainly because it was apparent that the two diseases were in some essential respects very different.

By this time great advances had been made at Ragama by the establishment and equipment of additional camps. Two quite separate camps were constructed above the station, and three more on the high ground near the junction of the quarry and main lines. Each of these was complete in itself, so that in case of infectious disease any of the camps could be isolated and the others left open for the reception of coolies. Had plague become established either in Tuticorin or the districts in which recruiting takes place, it would have been necessary either to stop immigration altogether, a proceeding which would have produced results almost as disastrous to the planting industry as the introduction of plague, or to quarantine all arrivals for a period of ten days. The latter alternative would have been adopted, and the necessary accommodation was provided. Fortunately it has not been found necessary to enforce plague quarantine, and no case of plague has occurred among immigrants. Outbreaks of cholera have, however, been frequent, and the results have fully established the complete success of the system adopted.

In December, 1900, some time after the arrival of the Boer prisoners, it was found necessary to locate some of them at Ragama, and the camp near the level crossing was given up for this purpose. New buildings had then to be erected on the land adjoining the original site near the railway station. The establishment is now complete, and it is improbable that any further additions will have to be made. The accommodation now provided consisted of three camps, one of which is only used in cases of emergency. The two camps in general use each comprise four permanent iron sheds, and each can easily hold 800 or, if necessary, 1,000 coolies. In case of necessity, therefore, over 2,000 coolies could be provided for in the camps. To each camp is attached a segregation shed. These are used when an outbreak of cholera occurs, but could be occupied by healthy coolies in time of pressure. These sheds have proved of the greatest service in preserving the rest of the coolies from infection. When a second outbreak has occurred at the camp it has been almost always in the segregation shed.

The total cost of construction of the Ragama camps was Rs. 285,164, while the total cost of upkeep up to the end of last year amounted to Rs. 64,103. The number of immigrant estate coolies who arrived in Ceylon for the seven years 1896-1902 was 549,387, and the number who left 685,025. In addition to these, 114,840 miscellaneous coolies, arrived in the Island and 268,847 traders etc. Of the estate coolies no fewer than 339,762 passed through Ragama, since the establishment of the camp in September, 1897, the heaviest year being 1900, when on an average 11,000 a month passed through the camps. The expenditure has been quite disproportionate to the very great advantages secured, and it will not, I think, be denied that the establishment of the Ragama camp has conferred an incalculable benefit not only on the planters, but on the community generally, by protecting the Island from outbreaks of infectious diseases which have in the past been the cause of so much trouble, expense, and anxiety.

Finally, I may remind you that with the extension of the South Indian railway to Paumben that place will probably become the chief port of embarkation for coolies proceeding to Ceylon, and in order to be prepared for this contingency the Government have lately been considering the advisability of taking steps to acquire additional land at Paumben, so that when the time comes there may be no difficulty in providing ample accommodation and a sufficient water supply for the immigrants who play so important a part in the welfare of our staple industry.

NUWARA ELIYA.

We often discuss the industries of the Island, actual and possible, but there is one industry—if I may so apply the term—which is yet undeveloped, and which may prove to be very profitable. I allude to Ceylon's advantages, so little known and appreciated, as a winter resort for visitors from Europe and as a sanitarium for the Eastern Colonies and South India and Burma. The extraordinary variety of climate to be found in this small Island its accessibility as the centre of shipping in the Eastern Sea, and the excellence of its hotels at Colombo and Kandy, are not fully known and appreciated. In Nuwara Eliya the Island possesses a health resort which in respect of scenery and salubrity of climate

and other amenities, is during the winter months second to none in the East; but when I arrived in the Island the advantages were not developed or appreciated. I drew public attention to these facts when I first opened the Council in 1896, and it was agreed that we should be justified in expending a moderate amount of public money on a place which is the only possible centre of education for the European children of the Colony, and which, in addition to the advantages which I have already pointed out, can afford to many officials and unofficial members of the community the means of regaining their health without a journey to Europe. The first step was to create a local machinery which could introduce the necessary reforms in a place where, it should be remembered, the Government is the principal landlord. This was done by substituting, with the unanimous consent of the inhabitants, for the Local Board of Improvement, nominated by, and under the control of, Government. Subsequently the sum of Rs. 60,000 was granted to the Board and loans to the amount of nearly Rs. 114,000 for the general improvement of the place.

It is more than probable that certain well-meaning critics will view these figures with regret. And it cannot be denied that under certain conditions this regret would be justifiable, but it can be shown that in the present case these conditions do not exist. It will be generally admitted that there are few tests which demonstrate more clearly the ebb or flow of the tide of prosperity among the great bulk of our population than the arrack revenue. The villager can only purchase arrack with the surplus that remains after providing the necessities of life. The existence of such a surplus indicates a certain amount of prosperity, and is certainly not a matter to be deplored, though it may be a cause for regret that the money is not better expended. As long, however, as human nature remains as it is this form of expenditure is inevitable. The increase in the revenue from arrack may be obtained in two ways: either by increasing the area over which the liquor is distributed, or by raising the price in districts where it has always been sold. The former policy is open to objection, and the statistics prove clearly that the increase in the revenue is not in any way due to an adoption of such policy. In fact the very reverse has taken place, the figures showing that notwithstanding

the increased revenue the number of taverns has been materially diminished. On the other hand, to obtain enhanced revenue by raising the price of intoxicating liquor is a measure to which the most ardent advocate of temperance can take no exception. If the price of arrack could be so adjusted that the poorer classes could only afford to purchase a supply which would not permit of their drinking to excess, the difficulty in the question would disappear. This is, of course, impossible, but it cannot be denied that a rise in the price of arrack is a very powerful aid to the cause of temperance. Waiving for the present the argument for and against total prohibition, it is clear that, if liquor is to be sold at all, the higher (within reasonable limits) the price the less the temptation to, or indeed the possibility of, excess. It may then be fairly contended not only that the revenue has been largely increased, but that this has been done by the most justifiable means. Certain alterations have been introduced as the time and manner of conducting sales, and as to various other details by which competition has been encouraged and the necessary facilities afforded to renters in the prosecution of their business. The increase is probably due not merely to the general advance in prosperity so plainly pointed out by the figures in my review of the financial progress of the Island but to the fact that Government is now securing a fairer share of the profits than it did formerly. To this source of increase also no exception can be taken. On the whole, it may reasonably be maintained that the maximum of gain has been secured with the minimum of those evils which are inseparably connected with the liquor traffic, however well it may be managed.

The system even now is far from being ideal, but no scheme has yet been discovered which is not liable to serious objections. The recovery of the duty at the still, for instance, would if practicable be a great improvement; it would eliminate much of the element of speculation which is now so objectionable, and would enable Government to exercise a more complete control over the manufacture and sale of arrack. But even Mr. Ellis's ingenuity has been unable to formulate a practical scheme by which this alteration could be effected, and to abolish the present system before it has been shown that a new and preferable one

could be established, would be an experiment fraught with the most dangerous consequences.

The Board has fully justified its existence, and the money has been well and profitably expended. The development of Nuwara Eliya has been indeed remarkable. Waterworks have been constructed, ensuring an ample supply of pure water; an adequate system of street lighting has been introduced; swampy marshes have been drained, and the sanitary arrangements of the town placed on a satisfactory footing; unsightly and unhealthy hovels and cooly lines have been replaced by model dwellings, which have done much to relieve the overcrowding among the poorer classes in the town: bathing-places have been provided for the natives, and washing-places for the dhobies.

Recreation has not been forgotten: a cricket ground—the best in the Island—has been laid down, a rifle range constructed, and a central library built.

The attractiveness of the town to visitors has been enhanced by the construction of new roads and attractive drives, the opening of a racecourse, the enlargement of the golf links and polo ground, and the laying out of an ornamental park. The land lying between the two roads which enclose the Nuwara Eliya Plain, much of which was in private hands, has been secured as public property and is rapidly being reclaimed and rendered healthy; a dredger for the lake has been built, and it is anticipated that with its aid, this once beautiful creation of Sir William Gregory, which is now disfigured by silt and marsh, will again become one of its chief attractions.

The material improvement of the district has been provided for by the establishment of a breeding farm at Harasbedda and of an experimental garden in the central part of the town for the cultivation of European fruits and vegetables on scientific lines. This latter addition should prove an invaluable aid to horticulture among all classes.

In my opening address last year I informed the public that the War Office had decided to establish, or rather to develop, the sanitarium for the troops at Nuwara Eliya in preference to Diyatalawa. Although the wisdom of this step has been seriously questioned, the

colony has loyally accepted the decision, and has generously undertaken to find £8,000 for the construction of a military sanitarium, which will no doubt still further tend to the development of Nuwara Eliya.

Last but not least of the factors in the growth of the sanitarium is the opening of the Uda Pussellawa railway, with its station at Nuwara Eliya. Although it is improbable that this hill railway would ever have been constructed if its final objective had been Nuwara Eliya, the manifold advantages in bringing the sanitarium into direct communication with the railway system, and in facilitating the transport of tea and garden produce from farther Uda Pussellawa to a profitable market in Eliya, and thence to Colombo and other places, are too obvious to need my recapitulation.

The Nuwara Eliya of six years ago is indeed scarcely recognizable in the sanitarium of to-day, equipped as it now is with all that is requisite to render it a mountain home for Europeans, a health station for invalids, a place of education for children, and an attractive resort for visitors. New houses have sprung up, no less than thirty-five residences having been built in the last six years, while nearly all the old houses have been enlarged and improved. The population in the last decade has increased 50 per cent., and the revenue has risen from Rs. 18,000 in 1896 to Rs. 30,000 in 1902. Hotels and clubs have advanced with the growing popularity of the place, and during the winter months the former are crowded with visitors, not only from all parts of the island, but also from India, Burma, and the Straits, which countries, to judge from the numbers who now resort to Ceylon, are beginning to find in Nuwara Eliya an accessible and attractive resort. Nuwara Eliya has now, in fact, a high reputation to maintain, and I hope there will be no relaxation of the efforts made during the last few years to gain for it the place among the hill stations of the East to which its splendid natural advantages entitle it.

KANDY.

Our efforts to develop Nuwara Eliya and the success which has happily attended them have led some people to infer—perhaps not altogether unnaturally—that the claims of the historic town of Kandy have been neglected. Such, Gentlemen, is however by no

means the case. It would be a matter of great regret to me if the wants of the beautiful hill capital with its world-wide reputation were ever ignored by the Government of this Colony, and I do not think that any such charge can be maintained against my administration. If the Government have lent the Nuwara Eilya Board of Improvement Rs. 114,000, they have lent the Municipality of Kandy nearly Rs. 160,000. Of this amount, about Rs. 100,000 has been spent in the purchase of a large extent of land within the catchment area of the reservoir, in order that all habitations might be removed therefrom and the contamination of the water-supply thus prevented. This very desirable improvement was one of the results of the report of the committee appointed by me in 1898 to make inquiries into the sanitary condition of Kandy, which had been the subject of repeated criticism by both civil and military medical officers. The committee's most important recommendation—a complete drainage scheme for Kandy—has, I regret to say, not yet been carried into execution. An elaborate scheme has been prepared, but it has not yet been decided how to meet its cost, which is estimated at Rs. 450,000. In the meantime some minor remedial measures have been effected by the Public Works Department and the Municipality. Among other public works, I may remind you that the dredging of the famous lake has been carried on with vigour by the aid of a loan from Government, and the silting up which threatened to destroy it has been arrested. The Kandyan wall along the head of the lake has been completed, and the beautiful drive which encircles it has been widened and improved. The electric light was introduced into Kandy for street lighting in 1901, and works are in progress for an extensive enlargement of the Bogambra recreation ground. By the purchase of the building formerly known as the grand Hotel a fine suite of public offices has been secured.

The many changes in Kandyan life and the rapid disappearance of ancient customs under the irresistible influences of a wider civilization render it especially desirable that we should have a permanent depository for those specimens of Kandyan art for which the hill capital is so justly renowned. A Kandyan Museum has therefore been inaugurated, and has found a suitable and appropriate home in the old hall of the Fiscal's office, which is itself a good specimen of Kandyan architecture.

GALLE.

I might well review the progress made in the other provincial towns of this Island, for I am glad to know that in each there are welcome signs of a vigorous life and a healthy recognition of municipal responsibilities. The activities of those who direct the affairs of these towns have had the warm sympathy and, so far as possible, the practical support of Government, but space will not permit me to notice on this occasion the improvement of each town in detail. There is one place, however, which I am unwilling to pass over, and which must always have a claim on public interest for the sake of old associations: I refer to Galle. The general idea about Galle is that since it ceased to be the mail port of the Colony in 1882 it has steadily declined, and few would be surprised if I were now to tell the people not only of a falling off in shipping, but also of decreasing revenue land and a diminishing population. From a time that was the regrettable, but not unnatural sequence of events. Not only did the tonnage of ships entering the harbour sink from nearly 700,000 in 1881 to under 250,000 in 1886, but the revenue dwindled from Rs. 74,158 to Rs. 48,730, and the population also slightly decreased from 31,742 to 31,675. The following decade, however, saw the commencement of a recovery, which I am happy to say has been continued in still more marked fashion during the period of my administration. The revenue, which by 1896 and reached Rs. 70,099, or nearly equal to the figure of 1881 was last year Rs. 91,652, while the population was found at the last census to have sprung to 37,165. Although the assessed annual value of house property in the Fort shows that the severe depression of 1882 and following years has by no means wholly passed, the figures I have quoted are convincing evidence that the famous seaport is far from being moribund. As regards shipping, its former glory has necessarily departed, the number of vessels which called at Galle last year being only 177, as compared with the 465 of 1881, and it is not likely that Galle will ever again become a great passenger port. Much, however, of its cargo and coaling business might be revived if the harbour were improved by the removal of several dangerous rocks and the construction of a small break-water near the lighthouse.

ARRACK.

The arrack rents from one of the most important items of revenue, and the increase under this head has been very large. During the seven years ending 31st December, 1902 the arrack revenue amounted to Rs. 21,374,708, while in the previous similar period only Rs. 15,086,255 was recovered. The difference, being the total increase in the sum paid during the latter over that collected in the former period, amounts to Rs. 6,288,453. The average annual income for the latter period amounts to Rs. 2,155,179 and during the former Rs. 3,053,529; this gives an average annual increase of Rs. 898,350. To put these figures in another way, the total annual increase in the arrack revenue would be equivalent to more than the gross proceeds of a very successful pearl fishery held during each year, and to more than once and a half the net proceeds. The sum recovered from the arrack rents in 1902, Rs. 3,493,575, would have more than paid all the charges for that year under the head Public Debt, or the whole of the Colony's military expenditure and Post Office expenditure put together.

Under the present system the revenue derived from arrack can be given not merely for 1902, as would be the case with ordinary items of the general revenue, but for 1903 and 1904 also. We are therefore in a position to take nine-year instead of seven-year periods. The results are still more satisfactory than those already given. The total revenue that will have been collected in the period of nine years 1896-1904, both inclusive, is Rs. 28,532,331. For the period 1887-1895 it is Rs. 18,180,246. The total increase therefore amounts to Rs. 10,352,085, and the average annual increase to Rs. 1,150,231. It is also worthy of notice that this largely increased revenue has been recovered not only without being compelled to put a single renter in jail (an unfortunate measure which had not unfrequently to be resorted to in former years), but without the institution of a single case in court. The increased revenue is chiefly due to the action taken in consequence of the able report submitted in 1896 by Mr. Ellis, whom I appointed a Commissioner to inquire into the question, and whose recommendations I adopted.

We must for the present make the best use we can, of existing machinery, and a record of the transactions connected with the arrack trade will, I think, convince any one that this has been done with a substantial measure of success.

In connection with the subject of arrack, I should perhaps allude to the illicit sale of toddy, which is unfortunately far too prevalent. It is encouraged, I am afraid, by the trivial fines which are too often inflicted by some police magistrates, who do not appear fully to realize the many objections to the practice, and it is a question which demands early consideration whether a minimum fine should not be fixed, or whether imprisonment for the offence should not be made rigorous, or whether some alteration of the existing system should be made.

SALT.

The salt industry is one of the most important sources of revenue. During the last thirty years, it has contributed over 28 millions of rupees to the coffers of the state, and I am glad to say the yearly amount is steadily increasing. Thus, the salt revenue for the seven years 1896-1902 amounted to Rs. 7,676,763, as against Rs. 6,766,394 for the previous seven years, an increase of nearly a million rupees. The average annual revenue during the period of my administration has been Rs. 1,096,680, as compared with Rs. 966,528 for the corresponding preceding period.

The Auditor-General, in whose hands the control of the Salt Department is vested, has supplied me with very full statistics showing the production and consumption of salt during the last thirty years, and they show that, while there has been a uniformly steady increase in consumption, the production is liable to very great fluctuations. Taking the last ten years, the difference between the highest and lowest consumption in any two years is only 97,886 cwt., but the amounts produced differ in some cases by nearly 500,000 cwt.

I regret to say that an extreme example of this irregularity in salt production has occurred in this, the last year of my administration, the supply of this year having been nearly a total failure, thus forming almost the only exception to the consistent march

of prosperity in every direction during the past eight years. To show how total the failure has been, I may inform you that previous to this year the lowest collection on record was 183,000 cwt., but up to September of this year only 20,000 cwt. had been collected. This failure has been due to a cause beyond our control, namely, unfavourable weather, and I have no doubt that there will be a speedy recovery as soon as the meteorological conditions improve; but meanwhile it is considered desirable to import salt from India, as in 1881.

The failure is only temporary, and it seems more than probable that not only is it possible for the local production to fully meet the requirements of the Island, but that a profitable export trade might be established. There is reason to believe that a considerable extent of land suitable for salt manufacture is available at Puttalam, Trincomalee, and probably in the Northern province. The cost of production is low, and there would, therefore, be a large margin to cover cost of transport to other countries, together with Government and exporters' profits. Before any active steps are taken in this direction, it will be necessary to discover the rates at which salt is bought and sold in other countries. Sufficient inquiry has not yet been made to justify the framing of estimates, because before anything is done towards supplying salt for export a stock amply sufficient for the wants of the Island must be provided, and this, if we are to be perfectly secure, should be equal to the supply required for two and a half years.

When I turn from production to consumption, that is to say to the revenue aspect of the question, I find the figures are very satisfactory. The regular increase in consumption has produced a proportionately regular increase in revenue, the amounts for 1896 and 1902 being Rs. 998,655 and Rs. 1,184,439 respectively. It is interesting to note the consistent manner in which the profit derived from salt has increased during the past thirty years. Dividing the period into three, it is found that for the first ten years the average annual profit was Rs. 679,779, for the second ten years Rs. 737,707, and for the last ten years, *i.e.*, from 1892 to 1902, Rs. 867,479. To put these figures in another way, the average net profits per hundredweight for the three periods have been Re. 1.75, Re. 1.81, and Re. 1.92, respectively, and it will be

noticed from both sets of figures that the last decade has been the most prosperous of the three.

The average price paid by the purchaser for the last ten years is Rs. 2.36 per cwt. Taking the figures for 1902, which do not differ materially from the average of the last ten years, we find that out of Rs. 2.40, the price paid per hundredweight by the purchaser, Re. 1.90 is net profit. The total net profit for the year comes to Rs. 980,021. In order to double this, or to raise, say, a million rupees, it would be necessary to raise the price of salt from Rs. 2.40 to Rs. 2.40 plus Re. 1.90, *i.e.*, to Rs 4.30. This would be within a fraction of 4 cents a pound, the present price being as nearly as possible 21 cents. Salt now costs in the Colombo bazaar almost 9 cents per measure, which weighs $2\frac{1}{4}$ lb, that is, 4 cents a pound. Were the price raised as proposed, the retailer must charge a little over 6 cents a pound to make his present profit. Even this sum could, if necessary, probably be paid even by the poorest class without inconvenience, but care would have to be taken that the price did not rise above that at which imported salt can be supplied.

REGISTRAR-GENERAL'S DEPARTMENT.

The history of the Registrar-General's Department during the period under review has been a record of continued prosperity and efficiency. In the land registration branch the number of deeds registered has increased from a yearly average of 56,963 in the period 1889-1895 to 82,207 in the period 1896-1902, an increase of 44 per cent.; the average yearly income of the department has increased from Rs. 137,075 to Rs. 231,730, or by 69 per cent., and the net profit has more than doubled, while the value of the deeds registered has increased from Rs. 43,841,020 to Rs. 72,276,660. Promptitude and accuracy in registration, so essential to the interests of commerce and agriculture, have been maintained, and still further improved by the consolidation of the indexes to the registers of the last forty years, which had become too numerous and bulky for convenient reference. In order to facilitate the inquiries into claims under the Waste Lands Ordinance, indexes have been prepared of the deeds and *sannases* executed under the native kings and the Dutch Government and

registered in the department under Ordinances Nos. 6 of 1866 and 15 of 1867.

The office of the Registrar-General, which shares the same building with the office of the Director of Public Works, has outgrown the accommodation provided for it, but this want will be supplied when the new offices for the Public Works Department are completed and the whole of the existing building is at the disposal of the Registrar-General.

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*ADMINISTRATION OF THE AFFAIRS OF CEYLON,
1896-1902.*

[EXTRACT FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW.]

VI.

PEARL FISHERIES AND MARINE BIOLOGICAL DEPARTMENT.

The pearl fisheries in the Gulf of Manner have been for centuries a lucrative source of revenue to the Government of this Island. During the one hundred and seven years of British rule over £1,000,000 net revenue has accrued to the Colony from these fisheries, representing an average annual income of some Rs. 150,000. But the income is precarious; for instance, during the period named there have been three long gaps, *viz.*, from 1837 to 1855, from 1864 to 1873, and from 1891 till the present year. Two centuries ago the Commandant of Jaffnapatam, writing for the instruction of the Political Council of that town, stated that "the pearl fishery is an extraordinary source of revenue on which no reliance can be placed, as it depends on various contingencies which may ruin the banks or spoil the oysters," and a similar statement would accurately describe the experience of the British administration.

The causes of this unsatisfactory discontinuity have hitherto been obscure. There has frequently been promise of a fishery, and the Inspector of the Pearl Banks after his periodical visits has reported an abundance of young and apparently flourishing

oysters on the banks. But the oysters have not come to maturity. The causes of this mortality, or disappearance were unknown. We had no scientific data to go upon. Nothing was known regarding the oyster, its habits and natural enemies, or of the reasons for its appearance and disappearance at particular localities, and without such knowledge it seemed impossible to count upon the pearl fisheries with any certainty. During recent years, great strides have been made in the science of practical biology, and in 1901, I considered that the time had arrived for a scientific investigation into the causes of the disappearance or mortality amongst the oysters, and I determined to enlist the ablest expert advice on the subject.

On the recommendation of Professor E. Ray Lankester, F.R.S., the distinguished Director of the Natural History Department of the British Museum, Professor Herdman, F.R.S., of the University of Liverpool, was approached, and eventually agreed to devote his energies to the task.

Within the last few weeks, I have received Professor Herdman's final report, which will shortly be published by the Royal Society with the co-operation of this Government. In this very complete and valuable work, Professor Herdman gives a definite explanation of the causes exercising pernicious effects upon the pearling industry, and he formulates a number of remedial, or rather cultural measures which he believes will bring prosperity and eliminate a large number of the unfruitful years. To quote Professor Herdman: "We are now in a position to give a sufficiently complete and continuous account of the life-history and habits of the pearl oyster to serve for practical purposes and to enable us to picture with fair accuracy the details of its life economics, its feeding and breeding, its struggles with enemies and competitors, with sand and with storms, and finally its association with Cestode parasites and the consequent process of pearl formation."

As to the past management of the pearl banks, Professor Herdman points out that no steps towards cultivating and preserving these have been taken. Nothing has ever been done in Ceylon to assist the pearl-oyster in the struggle against adverse influences; past efforts have been confined wholly to the exploitation of such banks as occasionally and fortuitously arrived at maturity, the successful fisheries being accepted as windfalls to be thankful for.

The report closes with a very concise and instructive summary of conclusions and recommendations. The causes of mortality of the pearl oyster, the reasons of the intermittence in the history of the fisheries, and the conditions which render some paars more reliable than others, are all clearly described. I have no space to notice these important points in any detail, but I may briefly state that the chief causes of mortality among the oysters appear to be as follows: shifting of sand due to the strong currents and the monsoons, the ravages of natural enemies such as voracious fishes, overcrowding, diseases due to the invasion of parasites, and over-fishing. As regards the intermittence of the pearl fisheries, Professor Herdman considers that "the main hope of introducing constancy of results and a regular succession of fisheries must rest upon a system of transplanting young 'strikes' or broods of oysters when they make their appearance on useless or unreliable paars to wherever there is room for them at the time upon ground where it is known they will have a better chance of living and growing to maturity." In this connection, I may mention that the most valuable and reliable paars appear to be the great Cheval Paar, the Periya Paar Karai, and the Muttuvaratu Paar. With reference to "over-fishing" or the exhaustion of breeding stock at a time when no further supply of young in the larval stage is being brought by currents from neighbouring grounds, Professor Herdman thinks that "in the future if transplanting is adopted it may be expected that such a state of affairs as the last fishery, or a series with no young oysters growing up in the neighbourhood, will be very unlikely to recur." I cannot here enumerate Professor Herdman's final recommendations in detail, but I have, I hope, shown that his investigation has been not only scientific, but of a thoroughly practical character, and his proposals generally appear to be well worthy of adoption.

Professor Herdman emphasizes the necessity of securing the permanent services of a trained Marine Biologist to supervise the inception and carrying out of the cultural methods which he recommends. Such an officer must be a man versed in the life problems involved, able to grasp their manifold complexities, and to assess at their proper values any unusual factors, and any indications of disease as they arise; competent to give practical

and immediate directions as to the course to be pursued, and to ward off or to checkmate threatening dangers.

Professor Herdman's inquiry was, however, not confined to seeking the best methods of resuscitating our pearl fisheries, but extended to all possible valuable marine products of the Colony, as to which he has made many useful suggestions. There appear, for instance, to be great possibilities in respect of sponge culture on an extensive and profitable scale at Trincomalee and in the shallows of the Jaffna peninsula, while the culture of edible oysters and of the pearl-bearing Tampalakam window oyster (*Placuna placenta*) is capable of extensive development.

In order that Professor Herdman's investigations and suggestions might be followed up by further practical study of local conditions, it was decided to establish a temporary marine laboratory at Galle, where the biologist has every facility for prosecuting his experiments. Apart from the value of the laboratory as the working headquarters of local piscicultural science such an institution has many and varied supplementary uses. It will act as a useful feeder both to the Colombo Museum and the Medical College. Further, as the Paradeniya botanical gardens and laboratory attract botanists to Ceylon from all quarters of the world, so in greater degree will the Galle marine laboratory attract zoologists, for whereas Paradeniya has several rivals in the East, the laboratory at Galle is probably unique in the tropical regions of the old world; it may well be doubted whether anywhere else there are equal opportunities for the study of a tropical marine fauna in conjunction with laboratory conveniences essential to successful research.

The first foreign scientific worker to avail himself of the opportunities afforded by the Galle laboratory for the prosecution of research has been Dr. Nils Svedelius, a Swedish algologist, who was engaged from December of last year to last August in studying Ceylon algæ. For the greater part of this period he made Galle his working headquarters, and he has expressed his deep indebtedness for the permission granted to him to make use of the marine laboratory and its conveniences for the furtherance of his special studies. Dr. Svedelius adds that much of the success which has attended his work in the Island is due directly to the

facilities thus afforded him—that without the opportunity to work in the laboratory his work would have been far from so complete as he believes it to be. Such a recognition is specially gratifying at the beginning of the history of the laboratory, and when as yet the appliances and fittings are necessarily of a temporary nature.

By the establishment of the Marine Biological Laboratory, therefore, we may, I think, claim to have made a valuable contribution to the cause of science. We do not, however, seek to disguise the fact that our primary object is practical, and I believe that if this object is kept steadily in view the institution will under competent direction prove both a credit to the Colony and a source of great material profit in the improvement and extension of local fishery industries.

The methods of fishing and of washing the pearls from the oysters have been practically the same as far as the history of the pearl fisheries go back, that is to say, for nearly two thousand years. On the occasion of the recent fishery much attention was paid, by my direction, to the question whether a better method might not be substituted. The old system is an excellent type of Eastern organization, but is hardly suited to modern conditions. Three defects are especially conspicuous. In the first place, it is a great strain on the administrative officers who on each successive occasion are charged with the duty of creating and supervising the camp. Secondly, owing to the large crowds of natives from the opposite coasts of India, from the Persian Gulf, and elsewhere, who, during the few weeks of the fishery, congregate on a spot which is at other times almost a desert, a serious danger to the health of the Colony is caused, both by reason of the opportunity afforded for the introduction of plague, cholera, and other diseases, and of the difficulty, under the circumstances, of providing adequately for sanitation. Thirdly, it is practically certain that under the old system an undue proportion of the profits of the fishery accrues, directly or indirectly, to the divers and, more especially to the merchants, as compared with the Government share.

From recent investigations, by means of diving dresses, on the oyster beds themselves, it is quite certain that a much larger number of oysters could be got at much less labour and cost, and with much less restriction as to depth and as to the state of the

weather and the time of year, by the ordinary dredging apparatus used on the English oyster beds. I propose, therefore, that the experiment of dredging should at the very next opportunity be tried on a small and experimental scale, with a view to the gradual substitution of the system, if it proves practically successful, for that of the native divers.

As regards the after-treatment of the oysters, at present both the Government and the divers sell their shares to merchants and others, who wait till the oysters rot and then extract the pearls. It need hardly be said that the existence of many millions of rotting oysters in a temporary camp of, perhaps, 40,000 natives is not conducive to sanitary conditions.

It has therefore been proposed that a machine adapted—but with considerable modifications—from the ordinary gold-washing sluice should be used by Government to wash the oysters which it obtains by dredging. Experiments in this direction, with my approval, were made during the recent fishery by Mr. George Dixon, who came to Ceylon as a gold specialist; and the results were at least so far satisfactory as to warrant me, after consulting my Executive Council, in authorizing that they should be repeated on a larger and more practical scale at the fishery which it is hoped to hold in the early part of next year.

With reference to Mr. Dixon's washing machine, I should, perhaps, explain that there was some difference of opinion as to how far it would be most advantageous to carry the process for which it has been devised. Its first operation would be to separate the shells of the oyster, with the matter externally adhering to them from the flesh of the oyster, within which it is now practically certain that the pearls always lie. The process might be stopped at this point, and the flesh of the oysters, including all the pearls, might be dried—perhaps artificially—and might in that state be sold either on the spot or in Colombo to speculative buyers. On the other hand, Mr. Dixon's original intention might be followed to the end, and by continuing the washing process—the whole of which (if Mr. Dixon is not over sanguine) can be carried out under lock and key—the entire flesh and appendages of the oyster might be gradually washed away and the pearls be left as the final residue. I am not satisfied in my own mind as to which of these two proposals is the better. I consider that, if the expense

is not prohibitive, both plans should be tried, experimentally and on a small scale, and that the comparative advantages should be hereafter considered.

Instructions have now been given with the approval of the Secretary of State for the washing machinery to be constructed, and preparations are also being made to experiment with dredges on a practical but still moderate scale.

OPIMUM.

I pass on to the difficult subject of opium. This question has engaged my anxious attention during the period I have been Governor of the Colony. In the second year of my term of office Ordinance No. 9 of 1897 was passed with the object of restricting the importation of opium by doubling the duty; it also altogether prohibited the importation of bhang and ganja. At the same time a select committee of this Council was appointed to consider the whole question of opium consumption in Ceylon in order that further legislation might be introduced, if it should be considered necessary. Effect was given to the committee's deliberations in Ordinance No. 5 of 1899, which imposed certain stringent conditions on the grant of a license for the sale of opium. These conditions are that no opium shall be sold between the hours of 8 at night and 6 in the morning; that the quantity to be sold at any one time to any individual, except a licensed retail vendor, shall not exceed 180 grains; that the opium shall not be consumed on the premises; that it shall not be adulterated or deteriorated in any way; that it shall not be sold to anybody apparently under the age of fifteen years; that wearing apparel or other goods shall not be received in barter for opium; that daily accounts shall be kept in a form, prescribed by the proper authority, of the quantities of opium received, sold, and remaining on hand at the end of each day.

It was hoped that these conditions—which were borrowed from the regulations in force in Bengal—would provide adequate precautions against the abuse of the drug. Care has been taken that the conditions are strictly observed, and last year I satisfied myself by careful inquiry that the necessary precautions were not neglected: at the same time I issued orders and adopted measures to make them more effective.

In spite, however, of the legislation of 1897 and 1899, the amount of opium imported has not decreased, but slightly increased, and this fact has recently formed the subject not only of comment in this Council, but also of inquiry in the House of Commons. And here, Gentlemen, I must repeat what I said when the question was under discussion last June. There is no issue all between the Government and its critics as far as the consumption of opium is concerned. We are not advocates, as some people would seem to think, of the consumption of opium while our critics are its antagonists. There is no issue between us. We all agree that this country must not be reduced to the condition of China. We are all of one and the same opinion that the vice of excessive opium consumption is one of the worst calamities that could befall Ceylon. I have the same object in view as the Anti-Opium Association and their friends, namely, to prevent the deleterious habit of opium consumption becoming prevalent in this Colony; but we differ as to the means and methods to be employed for attaining the common object and policy. The Anti-Opium Association apparently dispute the beneficial use of opium; at any rate, they would interpose such obstacles to its import as would render its use difficult if not impossible, if not for medicinal purposes, at least for its widely spreading use in connection with cattle. The preventive measures which would alone satisfy them would, in my opinion, as a similar policy in other cases has amply proved, defeat their own end by making illicit traffic in opium a most lucrative trade.

Take the case of Burma, for example. It was suggested in the recent debate in this Council that if the restrictions in force in Burma were introduced into Ceylon the evil of excessive opium consumption would be averted. It is admitted, however, that the system adopted in Burma has not been as successful as was anticipated, and revised measures are being introduced into the Province, but it is too early yet to judge of their success.

As I have said, I do not believe in the total suppression of the traffic in opium: on the other hand, I am of opinion that it should be carefully watched, and so long as it is harmless, if not actually beneficial, it should not be unduly interfered with: but if increased imports indicate a tendency towards excessive or even largely

increasing consumption by the people of the country, stern measures should be taken to check the growth of so pernicious a habit. That this policy is not merely theoretical, I have proved by the legislation of 1897 and 1899 to which I have already referred.

The question to be considered is, whether the apprehended growth of consumption is actually taking place; and this is the point on which the Government and all its revenue officers are at issue with those who favour heroic measures. The subject, on which I have constantly been in communication with my district officers and the police, was considered and discussed at the recent conference of Government Agents where the opinion was unanimous that the consumption of opium for other than medicinal purposes has not unduly extended, and that any increase of imports—apart from that consequent on the increase of population—is due to its widely extended use by native medical practitioners and for treating cattle, and to a decrease in smuggling. In fact, the consensus of opinion is that the consumption of opium is not increasing to any mischievous or dangerous extent. Certainly the bad effects which are so frequently noticeable in India are very rarely to be seen in Ceylon.

Nor do I think that the amount at present imported is disproportionate to the legitimate wants of the people. It is true that the imports have increased from 12,827 lbs. in 1895 to 21,278 lbs. in 1902. But the amount of imported opium has always been uncertain, and has varied from year to year in a manner which is not explained. For instance, in 1897 the imports amounted to 18,285 lbs., and 1900, after the restrictions imposed by the legislation of 1897 and 1899 had taken effect, they rose to 23,754 lbs. Last year the amount imported was 21,278 lbs., or only 3,000 lbs. more than in 1897 and 2,476 lbs. less than in 1900. The imports for the first three quarters of this year amount to 17,524 lbs. or about the same as the average of recent years. In these circumstances the import cannot be said to have increased, as is so often alleged at an alarming rate; indeed in my opinion, and in the opinion of my advisers, such increase as has taken place is to be accounted for by the reasonable and harmless requirements of a population increasing in number and intelligence. No importance need be attached to the increase in the amount of revenue derived

from this source, as this is undoubtedly due to competition and the much stricter precautions taken against illicit dealing. I hope also it is unnecessary for me again to repudiate the suggestion which is sometimes made, that Government attach any value to the very small revenue derived from the drug, except in so far as it indicates the success of the measures of prevention.

To sum up. The conclusion at which I have arrived after careful inquiry is that at present there is no necessity for hardening the law, but that the question should continue to have the vigilant attention of the authorities in order that any increase in the amount imported, greater than can be accounted for by the reasonable and harmless wants of a growing population, may be arrested. In the meantime, the powers which the legislature has given to the Government for the stern supervision of the trade and for the prevention of illicit sales will be unremittingly exercised.

VOLUNTEER FORCE.

The past seven years have formed an eventful chapter in the history of the Ceylon Volunteers. Their numerical strength has doubled, they furnished two contingents for the war in South Africa, and they also had the honour of taking a part in the Imperial pageants of Queen Victoria's Diamond Jubilee and the King's Coronation.

Shortly after I arrived in the Colony an important change was made in the command of the force. From 1881 when the Volunteers were first raised in Ceylon) up to 1896 they were commanded by officers who had retired from the army and held civil appointments in the Colony. In May, 1896, at the instance of Sir Arthur Havelock, a military officer recommended by the War Office was appointed paid Commandant and Inspecting Officer of the Force. Lieutenant-Colonel Vincent was the officer selected, and under his able command the change has proved a complete success.

In 1896, the force consisted of five branches, with a total strength of 1,162 men, distributed as follows: artillery 120, mounted infantry 110, bearers 50, cyclists 5, and light infantry 868. At the present time there are seven branches, and the total strength has risen to 2,807, comprising 1,257 light infantry, 161 artillery-

men, 135 mounted infantry, 66 bearers, 22 cyclists, 712 riflemen, and 454 cadets. The working staff of the corps has been strengthened by three additional sergeant-instructors, bringing the total number of sergeant-instructors to 16. The total cost of the force in 1896 was Rs. 106,309: last year it was Rs. 185,050. While there has been a steady growth in the older branches of the force, the increase in the total strength is mainly due to the formation of the two new branches, the Ceylon Planters' Rifle Corps and the Cadet Battalion.

MILITARY EXPENDITURE.

The annual military contribution on account of our share of the garrison is fixed at $9\frac{1}{2}$ per cent of the revenue of the Colony. The amount so reserved every year does not, however, represent the total contribution of the Colony for military purposes. In 1898 an extensive programme of additional defence works for Colombo was undertaken by the local military authorities with the assent of the Secretary of State for the Colonies, and towards the cost of these works the Colony has voted from time to time over five and a half lacs of rupees, and it may be hoped that Colombo is now safe from attack or raid by hostile cruisers. In addition to this expenditure on fortifications large sums have been spent on military buildings. When the amount of the military contribution was settled, the Secretary of State ruled that the colonial revenues should bear the cost of any new military buildings which might in future be required at Colombo or elsewhere in Ceylon, except Trincomalee. The somewhat indefinite liability which this ruling seemed to involve caused some misgivings, but the Colony loyally acquiesced in the decision, with one stipulation, namely that the concession agreed to by the Secretary of State, that the Governor should have a vote as to the necessity of the proposed buildings, should be embodied in the Ordinance which defined the liability. The necessary clause was accordingly added to Ordinance No. 2 of 1898, and when any new expenditure is proposed the General Officer Commanding has to satisfy the Governor that it is necessary.

During the seven years prior to 1900 no colonial military buildings had been erected; since that year there have been built in Colombo a new block of the echelon barracks, with accommoda-

tion for sixty men, a garrison school, and a handsome mess on Galle Face for the officers of the Royal Artillery, while three warrant officers' quarters in Queen street are in course of construction. The cost of these buildings has been defrayed partly by the sale of old military buildings—which realized about £7,000, but almost equally by direct appropriations from the revenue of the Colony, the amount already voted for the purpose being nearly £6,000, to which you are asked to add £800 in next year's budget. This year the Government has agreed to place a further sum of £8,000 at the disposal of the military authorities towards a sanitarium at Nuwara Eliya and a new residence for the General Officer Commanding at the latter place. It has also contributed £1,750 towards the formation of a musketry camp at Diyatalawa and towards the construction of a new rifle range there which will be also available for the volunteers during the camp of exercise. I am confident, Gentlemen, that you will heartily approve these generous contributions towards the requirements of the military forces in this Island, whose welfare has always been, and I hope will always be, a matter of deep concern and interest to all loyal subjects of His Majesty in this Colony.

GEOLOGICAL AND MINERALOGICAL SURVEY.

There is one item in the programme which I set before myself in my earlier years among you which, I regret to say, I have not been able to carry out in spite of repeated efforts. I refer to the much-to-be-desired geological survey of the Island. You will remember that I first brought the subject before you in my address at the opening of this Council in November, 1897, when I commented on the inconvenience caused by the absence of information on a possibly very valuable branch of our resources. I have already emphasized more than once the desirability of encouraging new industries and of developing the latent resources of the Island, and I consider that the Colony would be fully justified in incurring any reasonable expenditure on a geological survey, which there is good reason to believe would have very beneficial results. Unfortunately, difficulties have occurred which have hitherto proved insuperable. The geological survey of a country like this, of the geology of which practically nothing is known, is of course a work requiring considerable experience, and men pos-

possessing this indispensable qualification are not easily obtainable. Negotiations were first of all entered into with the Government of India, in the hope that that Government would allow their Geological Department to do the work, or at least lend us a skilled officer. The Indian Geological Department, however, had its hands full, and could neither undertake the work nor lend us an officer to do so. I was successful in 1899 in arranging a short visit from a member of the Indian Geological Survey, Mr. R. D. Oldham, who drew up a scheme for the organization of a geological survey of Ceylon, which he estimated would take fifteen years to complete. But the difficulty of obtaining a competent officer to supervise the proposed survey still remained, and my attempt to obtain the services of an expert from England was unsuccessful; Sir Archibald Geikie, whom I personally consulted on the subject, assured me that there was to his knowledge no one available for the duty. Yet another disappointment was the result of my efforts to secure the staff engaged on the geological survey of Egypt. Pending the release of that staff, I fear the geological survey of Ceylon must be postponed, but I certainly hope that it will eventually be undertaken.

A complete geological survey not being feasible, I next considered the possibility of initiating a mineralogical survey, and when in England last year I consulted Professor Dunstan of the Imperial Institute on the subject. He agreed that a survey and report on the occurrence, composition, and commercial value of such minerals as are of economic importance, with a view to their commercial development, would be of great advantage to the Colony, as leading eventually to their exploitation with the aid of native or English capital. Such minerals, as mica, corundum, ironstone, limestone, clays, and quicksilver ore, all of commercial value, are known to occur, but information is needed as to nature and extent of the deposits, the quality of the minerals, and their suitability for industrial purposes. Professor Dunstan also pointed out that if a mineralogical survey were undertaken, search might incidentally be made for economic minerals, the occurrence of which is probable on geological grounds, or as to the existence of which there is local information. Such a survey would also include those few minerals, such as graphite, which are at present worked, a report being made on the nature and extent of the deposits, the

methods now adopted in working them, and as to the existence of deposits of the same minerals in other regions of the Island than those in which they are at present mined.

At my request Professor Dunstan selected an expert to undertake the work on these lines, and the actual survey is now being conducted in communication and in co-operation with the scientific and technical department of the Imperial Institute, which has agreed to undertake the chemical analysis of all samples of minerals sent for the purpose, and to arrange with manufacturers and others for carrying out such technical trials of the materials on a large scale as are requisite to test their suitability for industrial purposes. The Institute will also obtain reports on the commercial value of the samples on the basis of the results of their chemical analysis and technical trials. The survey will extend over two or three years. Periodical reports are forwarded to Professor Dunstan, and at the end of each year he will report to this Government the results of the year's work, while at the end of the survey a complete report will be presented.

GOLD.

There have been rumours of the occurrence of gold in Ceylon from almost the earliest times, and it has been more or less deliberately, though spasmodically, sought by Europeans for half a century or more. In order to attain some definite knowledge as to how far gold is really native in Ceylon, I thought it worth while to summon a gold expert from home, and from May to December, 1902, Mr. George Dixon traversed a very considerable part of the Island, chiefly on foot, and consequently in the best possible way to ascertain at first hand such indications of gold as there might be. It must be remembered that only a general investigation was intended, with a view of ascertaining whether it might hereafter be worth while to make a more detailed—and consequently comparatively costly—investigation.

Mr. Dixon found gold widely distributed in many of the gravel and sand deposits of the Island, but in such minute quantities that, in his opinion, it would not pay to wash for alluvial gold. Careful and systematic dredging of the gravel deposits of some of the river-beds might, however, he believes, pay, especially if the apparatus used were, as is quite feasible, adapted for the winning not only of gold but of gems.

The presence of alluvial gold even in minute quantities implies that there must be, or must have been, rocks from out of which this gold has been "washed"; and it was therefore important to ascertain whether such reefs now exist and are accessible. As regards surface reefs of quartz, Mr. Dixon found from some hundreds of tests made on samples taken from the innumerable quartz reefs scattered over the country that in none of them was gold present in payable quantity. Gold, as originally deposited in rock formations, would occur not as permeating the rock material but collected in deposits or "pockets." Nothing of this sort has been found in Ceylon. It may be that the rocks in which the gold was originally deposited have all been disintegrated, scattering over the surface of the country the minute particles of free gold which are now found; and that when gold is now here found in quartz it is simply a case of secondary deposit, *i.e.*, of once freely scattered gold again taking part with other matter in rock formation. This would account for the existence of gold in our rocks only as more or less impregnating the whole substance of these rocks; and it leaves us still to find those other rocks, if any such still exist, in which gold was originally deposited in "pockets." If such rocks do still exist, they must be deep down below the present surface. Mr. Dixon suggests for consideration that these deep deposits should at some future time be systematically tested by drilling with a carefully selected apparatus.

COLOMBO MUSEUM.

For the Colombo Museum the period has been one of quiet but excellent work. Its first Director, Mr. Amyrald Haly, retired in 1902 after a term of service dating from the foundation of the Museum twenty-six years ago, during which time he displayed great assiduity in collecting and naming the many valuable specimens belonging to the institution. He was succeeded by Dr. A. Willey, F.R.S., D.Sc., under whose directorship the Museum will, I have no doubt, enjoy a prosperous and useful career.

I regret that it has not been found possible during my administration to effect the much-to-be desired extension of the Museum buildings. The question will undoubtedly have to be faced before long, for with the carrying out of certain new projects for the exhibition of specimens, the mounting of groups, the

display of antiquities, and the growth of the library, the space at present available will soon be exhausted. The addition of wings to the present building, as suggested some years ago, would enhance both the beauty and the utility of the institution. Some relief has already been afforded by the conversion of the north verandah of the library into an office for the Librarian and by the construction of an office for the Director separate from the main building. These additions, which set free other rooms for the use of the library, greatly relieve the congested condition of the latter, and afford space for new acquisitions to this important branch of the Museum. A room has also been fitted up as a mineral gallery for the exclusive display of the rocks and minerals of Ceylon, arranged and classified by Mr. A. K. Coomaraswamy, Director of the Mineralogical Survey of the Island.

OBSERVATORY FOR CEYLON.

During the later years of my administration the question of establishing a Magnetic, Meteorological, Seismological, and Astronomical Observatory in Ceylon has engaged my careful consideration, and last year I arranged with the Colonial Office that Mr. Human, the Superintendent of the Technical College, then on leave in England, should consult a number of experts, including the Astronomer Royal, Sir Norman Lockyer, Dr. Chree, the Superintendent of the Observatory Department at Kew, Sir Athur Rucker, Professor Milne, and Dr. Glazebrook of the National Physics Laboratory. The conclusion arrived at after interviews and communications with these gentlemen, whose courteous assistance I am glad to have this opportunity of acknowledging, was that a complete observatory for conducting magnetic, meteorological, seismological, and astronomical observations could only be established at a hill station—*e.g.*, Hakgala—at a minimum cost of Rs. 120,570, while even an observatory for seismological and astronomical work only, which might be carried out in Colombo, would cost upwards of Rs. 77,000.

I do not consider, and my opinion is shared by the Executive Council, that the Colony would be justified in incurring the heavy initial expenditure involved by the adoption of either of these schemes, and the considerable recurrent expenditure necessary for the adequate maintenance of either kind of observatory. Al-

though it is possible that India would derive some advantage from solar physical observations taken in Ceylon, there seems very small probability that any material benefit would accrue to this Island from the proposed seismological, magnetic, and astronomical observations. This being the case, such observatories would be scientific luxuries; the expenditure on them would be unremunerative, and for the present at least they should therefore give way to more pressing practical needs of the Colony. Should, however, any of the scientific societies in the United Kingdom, whose interests are more directly concerned, consider the advisability of establishing such an observatory under their auspices, I am sure that you will be prepared to facilitate their operations as far as practicable, possibly by a contribution of money and by the grant of land for the construction of the necessary buildings, if any land at the disposal of the Crown is found to be suitable and available for the purpose.

ARCHÆOLOGICAL SURVEY.

The Archæological Survey initiated by Sir Arthur Gordon in 1890, and continued by Sir Arthur Havelock, has been steadily prosecuted during the last eight years under the able direction of the Archæological Commissioner, Mr. H. C. P. Bell, C.C.S. Some three and a half lacs of rupees have been devoted to the survey, and although, from the very nature of the work, its progress is slow and incapable of demonstration by the cold test of statistics, there is no doubt that the money has been well spent, and that much valuable information about the famous buried cities of Ceylon is yearly being added to the history of archæological research. The Archæological Survey has excavated and surveyed the ruins of Sigiriya, has completed the same work over one half of Anuradhapura, and has made a commencement at Polonnaruwa, while the Commissioner has also visited, examined, and recorded notes concerning every known ruin or ancient monument of any importance in the North-Central Province.

In any case, however, restoration must naturally be regarded as the exception rather than the rule. In the great majority of cases the utmost that the Government can legitimately be expected to undertake is preservation, and that only where the monuments are important enough to be of public and historic, as distinguished

from exclusively religious interest. On the recommendation of Mr. Oertel, lists of such ancient monuments in the various provinces, including the remains of Dutch forts and buildings, have this year been carefully prepared, and it is proposed to hand them over to the Public Works Department, who will take the necessary steps for their conservation in consultation with the Archæological Commissioner. It is also proposed to place annually at the disposal of the Commissioner 'in addition to the usual archæological vote, a small sum to be expended on such minor restorations, with a view to conservations, as should be done immediately after excavation, while he and his staff are still on the spot to supervise operations. It is hoped that these measures, to quote from Mr. Oertel's report, will "at a minimum outlay enable much good and lasting work to be accomplished towards the worthy preservation of Ceylon's ancient monuments."

Though not directly connected in any way with the Archæological Survey, it is appropriate that I should record here that the Government recently contributed—with your consent—a sum of money towards the repair of the Dutch Church at Wolfendahl. This building is in a somewhat different class to those I have so far referred to, but it fulfils the condition which I have enunciated as to the possession of public and historic, rather than of exclusively religious interest. This fine old church is indeed one of the few surviving landmarks of the past, and a conspicuous memorial of Dutch rule, and there would, I consider, be cause for great regret if it were allowed to fall into decay.

GOVERNMENT VETERINARY SURGEON'S DEPARTMENT.

A small department which does much excellent though unobtrusive work is that under the direction of the Government Veterinary Surgeon. It is only in recent years that any systematic attempt has been made either to keep any accurate record of the ravages made by cattle disease or to take any but the most primitive steps to combat those ravages. With the exception of some statistics compiled by the Cattle Commission appointed by Sir Hercules Robinson in 1867, there are no returns to guide us as to the extent to which cattle disease prevailed, while previous to 1895 there is no record of any preventive steps other than those which the village headmen were supposed to take.

Although the efforts which have thus been made to combat cattle disease in the Colony have, as we have seen, been attended with marked success, there is still room for further precautions. It seems to be established that murrain is not endemic, and that the cases which occur are the lingering remnants of an outbreak originally traceable to imported cattle. The number of these increases yearly, and last-year was nearly 30,000. It has therefore been proposed by a committee appointed to consider the question in 1901 that the importation of cattle should be confined to Colombo, and that cattle imported at Colombo should be detained on arrival at a special quarantine station. The details of this proposal are still under consideration.

The existing laws are sufficient for all ordinary purposes, but in the event of quarantine being established an amendment of Ordinance No. 9 of 1891, authorizing a general quarantine, and an enactment closing the outports of the Island to cattle importation, will be necessary.

GAME PRESERVATION.

It is a great pleasure to me, that the protective measures which have been taken in recent years, coupled with the excellent work done by the Game Protection Society, have very largely diminished the dangers which at one time threatened to destroy the reputation for game which Ceylon has so long enjoyed. Though it is to be feared that the slaughter of sambur and spotted deer still continues far beyond the limits of expediency, there are welcome signs of the increase of game even in districts where it was fast disappearing under depredations of gang hunters and night poachers, and Mr. Farr, the energetic secretary of the Game Protection Society, informs me that the slaughter of spotted deer has been reduced in the plains, while in up-country the slaughter of sambur has been entirely stopped. Certainly there is no sign of decrease in the number of elephants.

COMMISSIONS.

I am a firm believer in the utility of the power enjoyed by the Governor of appointing Commissions for the special investigation of problems of complexity or unusual difficulty. In the first place, they afford a practical means of collecting a large

amount of valuable information, which can at once be tested and sifted by personal examination instead of by the tedious process of correspondence; secondly, they enable the Governor to obtain an authoritative statement of views and recommendations which are agreed upon by leading members of the community, both official and non-official, after calm discussion and impartial investigation; thirdly, their advice is particularly useful when legislation is contemplated on a subject requiring technical or expert knowledge. I have not hesitated, therefore, to make a free use of the power conferred upon me by Ordinance No. 9 of 1872, and during my term of office I have appointed some twenty-two Commissions on subjects so diverse as the construction of hill tramways and the control of notaries public, and I think I am correct in saying that every one of those Commissions has produced practical results, legislative or administrative.

I can only briefly refer to those Commissions which are at present sitting. The Incidence of Taxation Commission, to which I alluded in the earlier portion of this Review, has not yet reported, although it was appointed nearly two years ago. The range of its inquiries is, as I have explained, very wide, and some delay has taken place owing to the absence of some of the members in England.

There are two other Commissions which have not yet sent in their reports. In consequence of the prevalence of thefts of cacao produce in certain districts in Matale, I appointed a Commission early this year to inquire and report where the present condition of affairs justifies special legislation. Lastly, there is the Commission on the proposed light railway to Chilaw and Puttalam, their main object of investigation being to discover how far such a railway would successfully compete for goods traffic with the existing canal. Since their appointment a further reference has been made to the Commissioners as to the possibility and desirability of connecting the proposed railway with the main line at Kurunegala.

In addition to the numerous Commissions which I have enumerated, I have occasionally appointed carefully selected committees to deal with questions—generally departmental—involving intricate detail or divergent interests. Such committees, which facilitate direct conference, have proved of great assistance in placing established facts and definite recommendations before Government in an effective and expeditious manner. Their practical effects are well exemplified

in the results of the various committees appointed from time to time to re-organize the Civil and Clerical Services and the other important departments of the administration.

LEGISLATION.

In my opening address in 1896 I stated that I did not propose to make many demands on you as regards legislation, and I explained that I preferred to make the best of the existing laws and to adapt and bend them when possible to administrative requirements. That policy has been generally maintained, but while the new laws added to your statute books are comparatively few, the work of amendment and adaptation of existing ordinances has been continuous and far-reaching. There are very few branches of the administration which have not at one time or other within the last seven years come under your notice as subjects of amending or consolidation ordinances. A bare recital of the subjects of such measures will show how wide has been the field of your legislative activity.

Indeed, as I remarked at the opening of last session, the past few years have seen so much legislation that our requirements in this respect are almost exhausted, and I hope that my successor will find himself in a position to devote his time and energy more continuously to the increasingly onerous duties of administration, unhampered by the constant necessity for legislation.

SMOKE NUISANCE.

The great cold of the last few days has shown what a great nuisance the smoke in Calcutta can be. For those that drive down the Red Road or the Esplanade, it has perhaps meant nothing more inconvenient than frequent change of linen and more frequent need for a "wash and brush up." But to the dweller of the lowly cottage, it has brought manifold evils. Sooty clothes, sooty lungs, and sooty nostrils in the way of physical discomforts, are dire enough; a hacking cough to the strong, pneumonia to the weak and pleurisy and bronchitis to the children are dreadfully more so. Shortly before dusk a dense smoke, more like a fog than a winter mist, has hung over their dwellings every evening. Locomotion indoors with eyes burning and throats choked by the coarse coal-dust with which the atmosphere has been saturated, has been no less difficult than trying. Even out of doors, things have not been much better. They have all been asking,

Whence comes this dense smoke?

The learned have told them that it comes from the chimneys. There are chimneys on the Railway at Sealdah and Howrah, in the Steamers on the river and in the Mills in and around the town. But there are no chimneys at or near many a spot where the smoke has been of the densest.

How is this explained?

So queried Nathaniel Christian the other day while squatting on the curb of the footpath opposite his hut in Circular Road. He thought hard over the matter, co-agitated, discussed, examined, argued,—but got no clue. He returned early on the following day from his compositors' desk in a private press—agitated and perturbed. And now he watched. Behold! the entire smoke issuing from his ~~bustle~~ rose up in curls between 4 and 5 P.M. trailed over a distance but instead of flowing away, hung heavy like a cloud

right over the huts that sent them forth. It descended at nightfall as a dark shroud and enveloped the little cots from corner to corner in a fast, dreary embrace.

He strolled forth. To his dismay he saw that the area close to the chimneys of Incinerators, Soorkee and Jute Mills was clearer and lighter. The maidan was lighter still whilst Sealdah and the river were far better than he had imagined. Good Heavens! what was this? His long cherished hope was gone. He was forced to admit after all, that the authorities had blundered. He had read in his pice paper the day before that Government was going to abate the smoke nuisance by legislation. He had understood that the Bill was directed mainly against chimney smoke of factories and mills but scarcely against that of the *Baur-cheekhana*. "And yet it is the kitchen smoke that causes our ills" said Nathaniel aloud, "What does the *Sarkar* care for the comfort or convenience of us poor chaps? Their main concern is for those bigwigs who live in palaces." He returned to Circular Road corner close to his hut. He asked every way-farer he met whether the smoke over his *bustee* yonder was not more black, more dense, more choking, than that over the Sealdah Railway Station or the Balliaghata mills. Yes, it was and no mistake. His eyes had not deceived him.

Could not this be lessened?

Yes it could. Nathaniel had but little smoke in his hut. He had used coke for his kitchen ever since its cheapness had brought it within his reach. That explained all. It is the hard, black, glossy, bituminous coal that burnt badly and emitted a foul smell and fouler smoke that was responsible for the blackening of his bustee externally and of its inhabitants internally. In the lowly hut where supply of fresh air is but limited, the *choola*, or fireplace is usually situated in an inaccessible corner. To it the oxygen of the limited air of the overcrowded room finds but tardy entry. Hence the bluish light in the fireplace of that deadly poison—the carbon-monoxide—which has killed many an innocent babe sweetly asleep before its mother gone to fetch the day's food from the bazar after lighting her *choola*, has had time to return.

The burning of coke being smokeless is not only free from danger but it also gives the heat that is needed for ordinary

cooking. Coke can be ignited with ease, particularly gas coke—that grey, loose, spongy pumice like substance which can now be easily and cheaply got.*

Nathaniel wondered whether the Government should not legislate to prohibit the use of bituminous coal and encourage the use of coke for cooking purposes. The poor do not know good from bad. They need help. When safety and economy are both combined in the use of the coke, why not make its use compulsory?

Is there not a sufficient supply?

What then are the objections to this being done?

KEYAR.

* Mr. J. C. Watson, the energetic and successful Manager of the Oriental Gas Company, has done a public good by reducing the price of Gas Coke to five annas per maund so that it is now within the reach of the most humble cottager, being cheaper than the ordinary coal available in the market as fuel for the poor.—ED. *N. M.*

GLIMPSES OF CALCUTTA.

II.

No description of a town without some idea of its inhabitants and their protection should be fair. The people of Calcutta as already hinted in our Part I, are composed of all nationalities found upon the civilized globe. They are Europeans, the Eurasians, the native Portugese, the Armenians, Parsees, Jews Chinese born here and abroad, Marhattas, Hindoostanis, Orryas, Santals and others. The cockneys of Calcutta, with whom the anglicised foreigners mix in a crowd, are generally heterodox in their ideas and doctrine, but are at the sometime progressive and hardworking. They are stigmatised by the Anglo-Indians as Congressmen, disaffected against the Supreme power, but on the other hand, the aristocracy are ease-loving and fashionable. They live upon the wealth of their predecessors, and do rarely employ it in remunerative speculations, or in the improvement of native industry or trade. They sometime finance European merchants, who are looked upon by the mass of the people as part and parcel (*sic*) of the rulingbody, and who keep little touch with the people. In winter, the population of the town increased by the influence of foreign tourists and tradesmen, swell the number by some thousands. The residential buildings of the natives, with few exceptions, are not very healthy and commodious. The European quarters are thinly inhabited, and they are kept salubrious at the expense of the natives. The wards of Barrabagar, Colootollah, Jorabagan, Janbazar and Taltollah are most crowded, and the population generally are intermixed with natives and foreigners of several nationalities who are generally poor. The staple food of Calcutta is rice, wheat and pulses, and very rarely meat also. The rice however is exported to a large extent to the detriment and loss of the poor. Common rice is exported to London, Liverpool, Hamberg, Bremen

and to Demararah ; but table rice is exported to Cape Colony, Natal and some Boer countries. The native economists attribute the high rate of rice in Calcutta to the consequences of the export. Their view is that some sort of protective tariff is necessary to save Bengal from repeated famines.

This vast multitude of people over nine lakhs gathered round the city and its suburbs, are protected by the Government Police under the guidance of a Commissioner assisted by a European Deputy of some experience. We, however, recommend that a native Deputy may be placed instead. The strength of the town Police consists of three Superintendents, eighteen Inspectors and some Sub-inspectors, thirty-one sergeants, a few Darogas, sixty-nine corporals, fifty-one special constables and about fifteen hundred constables, besides the reserve force with its Superintendent. The Detective department has got a force of its own guided by a superintendent directly under the Commissioner. There is also a band of River Police and Fire Brigade to guard the accidents by water and fire. The above town police is supplemented by another force of nearly half the number as above in order to guard the amalgamated suburbs of the city. In addition to the above, the city has a Coroner, a Protector of the pilgrims and a Superintendent of the arms act who help the regular Police. There is also a body of Government Police-guard. The costs of the Police is estimated at a little over eight lakhs a year. But, despite the expenditure and the collection of the above force to protect the life and property of these nine lakhs of people, the Local Government in its annual Report of 1902 remarks, "the working of the Police force under its Commissioner in Calcutta, left much to be desired." We venture to suggest that a good deal might be done by a little change in the staff, and also of the law that guides the police. The Magistrates are independent of the Commissioner, who are called the Presidency Magistrates working directly under the Local Government.

We have already intimated that a native Deputy Commissioner would suit the Town better. We also think that there is no need of Superintendents in Calcutta where the Inspectors now are generally men of education and skill. The Detective department may be invigorated by the savings indicated. These detectives may have some supervision of the local police as well, who may

report the conduct of the local police through the Deputy. The above arrangement would act recipocally upon the negligence and corruption of police so often complained of.

In the Police Act I fear there is very small check for assault upon persons, and rowdyism in the streets. The following acts are cognizable by the Police without warrant:—Driving camels or elephants without pass; (2) driving vehicles without light in dark inghts; (3) training horses or driving cattle negligently; (4) obstructing a thoroughfare by conveyance or carts; (5) lighting fires and discharging guns or fireworks in unlicensed places or streets; (6) bathing in the public streets; (7) drunken or riotous and indecent behaviour in the streets; (8) public begging; (9) people with implements of housebreaking or stolen property in his possession. But no relief is found by gentlemen insulted or hurt by gundas (bullies) in the streets, when the injury upon the person is short of grievous hurt or bloody nose. The offender escapes, when the assault is by unknowu persons in the darkness of night. The gentlemen witnesses being very averse to go to Court in this Country. Calcutta, like most cities, have a large number of unfortunate women. It is a necessary evil of commerce and large congregation. It is observed in the last Census Report, that a very high proportion of male to female population is a direct feature of Calcutta. We find from it about $2\frac{1}{4}$ lakhs of husbands live in the town without wives, in addition to two lakhs that are unmarried. This fact alone induced a large number of unfortunate females of every tribe and caste to congregate in most parts of the town. The Police is after seggregating them to some specified quarter. How far it would be beneficial to the community I don't venture to assert. But it is obvigus from the premises that a lock hospital in Calcutta is only a corrollary to the above evil. Syphillis transmits itself to remote generations, and is a source of hydra-headed maladies, so as culprit attacked with the above disease must of necessity be kept aloof. Of course, there is law against solicitations, which gives in plea for extortion, and not prohibition of the sin. The Police Commissioner is empowered to regulate brothels, but he very rarely interferes in the dirty business. The professional dancing girl is an old Institutton of Hindu temples, so to tax them for their income is immoral and against public policy.

There is a small class of residents in the town, the enuchs, Hermophrodites or Higiirahs that are always under Police surveillance. They are generally beggars and outcastes living in the native quarters of Calcutta. In India, their position is peculiar, they are placed abroad without any other business or profession than begging from shops and householders. The natives as a rule pay them on occasion of births and other pleasant festivals, and the latter sometimes abuse the charitable sentiment of the community, by attempts at extortion from females. But they are generally law-abiding and peaceful. The old members of the class again live upon the charity of their own class.

Again in the Magistracy's and Police of Calcutta proceedings under Section 145 of the Criminal procedure Code are not encouraged, consequently High Court suits for possessory disputes increase daily. The increase of lawyers in town cause increase of legal proceedings in Criminal Civil Courts of Calcutta. Control of Police upon conveyances for general public use such as hackneys and trams is salutary to a certain extent. But at the same time it causes extortion of the poor, as the last strike of carts and hackneys at Calcutta shewed most clearly. The provision of the Hackney Carriage Act which makes the driver of such gharry liable to deliver any goods accidentally left in it by the hirer to the nearest police station within 24 hours may be mentioned as a hopeful sign of Police Control over them. The general surveillance of the old offenders by the Police should be more right in the town than at Moffasil.

The next great institution in connection with the city is the Calcutta Post Office. The office stands on the west of the Dalhousie in a large gothic quadrangular building the northern boundary of which is the site of the old Fort of Blackhole notoriety. The head of the Calcutta Postal Department is called the Presidency Postmaster who is helped by a Deputy Post master and three assistant Post masters. Of course, the whole department is under the guidance of Director General of Post offices, there is a Superintendent in charge of the sub-offices that are scattered all over the city and its suburbs. The sub-offices which both receive as well as deliver communications are one in each warder section of the town assisted by several under-offices (so to call) that only receive letters and communications like the numerous letter boxes and stands

fixed all over the streets and public offices of the town. The principal subofficers are many in number, with a Dy. post master in charge of it with rather a poor stipend. There are also seven or eight Inspectors of the mail agency department to control and supervise its punctual execution. The Saving Bank department attached to the postal offices works most creditably to the benefit of many poor people. The telephone exchange signaller attached to the Head office is an important officer. But the telegraph department attached to the post offices does not work well for want of confidence of the people, who mostly run to the Government telegraph office or to the railway stations for their communications of urgency. The delivery department, the distributing department and the sorting department, are in the charge of the Assistant Presidency post masters and other asst. post master controls and supervises over the Registration, the Parcel and F. P. Department of the office. The postal Saving banks, the deposit and the money order departments are under the control of a Third Assistant postmaster. Having regard to the onerous duties of the last officers, his departments are working satisfactorily for the last few years, whatever may have been the laches in former days. The delivery Department, I fear, have overshot the mark, specially in the native or the Black Town. The night delivery are done most carelessly and to the detriment of many poor families. We think night deliveries in these quarters may be stopped with advantage, except for such communications that are franked urgent or commercial, the resident members would be too glad to get their letters next morning than to find that their addresses are mistaken or not properly served. With regard to the postage rates, they should be lowered in cases of news papers and official papers. The profit to the Government I believe will not be affected by such a change. The working of the Dead Letter Department is desired to be improved. The punitive charges, of returned *Bearing* communications are not equitable nor beneficial. The offence lies with the addressees and not with the senders, though the latter is charged for the default of another.

LUCUS.

*EXTENT OF HUMAN ENDURANCE.—MAHARAJA
SRIBATSA.*

(A SKETCH FROM THE MAHABHARATA.)

Once there reigned the great Sribatsa, as Emperor of Bharat-varsa. He was a great warrior, a shrewd and intelligent man, and a handsome person, besides a most loving husband and an affectionate father. But the most rare qualities, he was the fortunate possessor of, were his unstinted liberality to the poor and deserving, truthfulness, piety and above all his devout religious instincts. He had an equally good queen in Chinta Debi, the daughter of Maharaja Chhitra Sein. She was as beautiful and graceful in figure as she was good and kind. Both husband and wife undertook and performed many a religious ceremony for the sake of the works themselves, appropriating the result to the Supreme God. However one day Lakshmi—the presiding goddess of affluence, and consort of Narayan, the supreme ruler of the Universe, and Sani (Saturn of the English Astronomy) had amongst themselves a hot controversy as to who was really great among the two, each claiming superiority of the other. In their helplessness to come to a decision, they resolved to apply to Maharaja Sribatsa of Ayodhya (oudh)—a man in flesh and blood, who was reputed in his time for his singular qualities both of head and heart and independence of character. One day, Sribatsa going to bathe was accosted both by Lakshmi and Sani at the very threshold of his portals. The Maharaja instantly made his obeisance to them both, and expressed his eagerness to know what made them appear at the place of an insignificant servant of theirs like him. Sani in reply said that they had come to have their precedence settled, once for all, by him—one who was noted for his righteousness all over heaven and earth. The Maharaja humbly replied that as that was no time for any business, he would ask them to come on the following morning, when he would give

his best attention to the matter. Both Lakshmi and Sani left, and Maharaja Sribatsa, after his ablutions were over, returned home mortified and related all what had happened, to his queen—the good Chinta Debi, who pensively said that the matter did not smell well—that the denizens of heaven should come to a man for the decision of so nice a question as theirs. The king hurriedly called his council and asked his ministers, as to what might be done. After great deliberations the decision was thought to have been most hazardous, and a novel way of solution was determined upon. As it was no matter of serious thought as to who was to have precedence—one being the giver of affluence and every thing good, and the other a merciless persecutor with no good to give. A gold and a Silver chair, were placed at the Darbar Hall, one on the right and the other on the left, and the Maharaja and his ministers solemnly awaited the arrival of the contending parties, and the result of their decision.

Suddenly both the goddess and Sani entered the hall, and were most ceremoniously received, when both of the guests, as it were, mechanically took their seats, the former on the gold chair, and the latter on the Silver one, right and left, and merrily went on chatting for a time, when suddenly the decision of their question was demanded. Maharaja Sribatsa, with great tribulation replied that it was no matter for him to decide, as they had of themselves decided their case, as was indicated by the seats they had respectively taken. This elated the goddess the most, and infuriated Sani to the highest pitch. The latter instantly left the place in fiery temper, threatening destruction to Sribatsa; while the good goddess showered her choicest blessings upon him, and assured him of her perpetual endurance in his family. But the wicked Sani was bent on the destruction of the king and his kingdom. Gradually the Maharaja felt the wane of his intellects and wealth. His palace, stables, gardens, and orchards, were, one by one, falling to pieces, and soon lost their pristine glory. To fall off from glory and affluence, and to continue in a most wretched condition, pitiable to God and man alike, was not a condition for one who reigned an Emperor so long in all the splendour of a mid-day sun; and he could not suffer to continue there any longer amidst the scenes of his former fame and splendour, and determined to abdicate his throne to repair to a wilderness, which he thought,

was just the place for him at the time. His resolution was immediately taken. And Sribatsa asked Chinta Debi to repair, for a time, to her father's, during his absence and to look for the time when it would please God to re-unite them together. But Chinta Debi felt the words of her lord to be most outrageous, and replied with considerable warmth of feelings in saying that she was not a fallen woman to look for personal comforts and happiness; besides, that was not the time for her to devote in pleasantries, forgetful of her lord, who was just in need of her care, consolation and support. "Do you think," she said, "Your Queen to be so weak a woman who would in your way add perplexities anew, during your trials and sojourn, and be more a burthen to you than a ministering wife? Do you not know, that a true wife, in times of adversity, prove more of a ministering angel than a common woman? As a man you know not, that she may prove a lioness. whatever you may say, I must accompany you, and share your troubles and anxieties." Sribatsa, finding Chinta Debi unrelenting, asked her to do as she liked, and to take as much of wealth in gold, diamonds and pearls as was possible, that might help them during their banishment. Thus told, Chinta Debi took as much as she could, and bound them up in a coarse blanket, and was ready to start. The Master and Mistress of a vast, beautiful and green country stealthily left their home and country, unseen and un-noticed, to launch into trials that never before befell a monarch and his bride. Alas! such is the common lot, to which the proud, selfish and domineering man is often subject! But no sooner they had gone a considerable distance of their journey they found a stream boiling with sharp current, and a man engaged in ferrying over on a small and damaged craft. The king begged the man to ferry them over, but the man replied that as his craft was worn out and small, either they or their baggage would pass first, for his craft was not equal to carry them along with their baggage, one and the same time. The baggage was placed first and the man applied his implements and plied his boat in one stretch and disappeared. There was no river, and alas, all was clear. The Saturn, in the garb of a man, robbed their riches, to render them helpless. The Queen consoled her lord, who was wailing his hard lot, to take heart, and combat the evil times. She said, "My lord, what is the

matter, that you should thus give way to despondency, that befits but a coward? Let Sani see, that, we are glad to suffer for our conviction. We must make our way through. A Kshatriya is always the master of his situation. There is the greatest and good God, Who has been presiding over our destinies. How long will Sani persecute us in this way? Oh how many most upright and kind hearted of men have not suffered for their convictions? We have our God with us—who is always helping us even in this our distress. Remember, sufferings alone may reach a man to the lotus feet of Sri Hari. Besides, I am with you, to bear your company and share your sufferings. Cheer up, my lord, and let us proceed."

They then proceeded to the forest of Chitrathwaja, which they reached after a good deal of troubles and sufferings. Maharani Chinta Debi who was never accustomed to such sufferings and privations, was almost fainting, and expressed her inability to proceed any further, before she had taken a little nourishment. In a clear brook, they had their bath, and ate a few of the ripe plums they found in the forest, and drank to their hearts content of the crystal water, which gave them fresh vigor and strength; and they renewed their journey which lay through a thick wood, that was full of giant trees and ferocious beasts. However they were proceeding with every caution, when suddenly they met a number of fishermen. The king prayed to them for a fish to eat. They gave him a *Soil* fish, which the Maharaja gave to his queen to have it fried. Chinta Debi made fire and had the fish well fried, but as atoms of dirt and ashes were seen sticking to it, she desired to have it thoroughly washed before serving it to her lord. She went with it to the river, and began washing, but lo! suddenly the fish with a splash of its tail rushed into deep water. Has any body ever heard or seen that the dead get life? But when a man falls into evil times, to fill up the cup of his miseries, any thing and everything be possible. Such is the belief of a Hindoo, and that alone has made him a Hindoo. Now Chinta Debi got dumb at what she had just experienced. Her lord was hungry and one who was accustomed to feed on excellent dishes was to have been served only a fried *Soil*, and that was lost to him, the most pious of monarchs whose gifts, to the poor and deserving, knew no bounds. Alas! how could she endure it? She returned

to her lord, and related what she had experienced of the *Soil* fish, and broke into tears. But Maharaja Sribatsa encouraged her and attributed this to the work of the mischievous Sani. They hastened in search of some human habitations, and fortunately soon found some. There were a number of wood-cutters who lived on selling woods. They persuaded the Maharaja, whom they did not know to be as such, to adopt their calling, as profitable. And Maharaja Sribatsa had to adopt it for his living,—such are the strange ways of the world! However while the wood cutters collected heavy bundles of fuel-wood for sale, the Maharaja gathered only a handful of sandal wood, which the wood cutters could not recognize to be valuable. This fetched the Maharaja good income. One day he purchased good many excellent necessary things for food, and requested his queen to cook good dishes, as he intended to invite his wood-cutter friends to dinner. It was so done. The Queen prepared excellent dishes, that were only worthy for the kings, and when the wood-cutters ate of them, they could not believe that they were not the nectar of heaven. Hence forth they began to value their friend the more. The couple, Maharaja Sribatsa and his consort, spent here a considerable period of time in esteem and good wishes of their neighbours. Suddenly one day, a few boats full of merchandize belonging to a merchant, that was passing by that way got aground, and could not have been floated. An old decrepit Brahmin appeared to the merchant and told him, that unless he invited all the females of the woodcutters, to touch his boats, they will never get afloat. The merchant invited them all, telling how awfully he was situated. The tender hearts of the wives of the wood-cutters, were touched, and they came one by one, and touched the boats, but nothing availed. The old decrepit Brahmin again told the merchant, that there must have been one, that was left out. "Is there one, mothers, who has not come?" Asked the merchant. "Yes Sir, one, prevented by his husband, has not come," replied the women. The merchant went personally to Chinta Debi, and implored her to save him and his family from total destruction. The kind heart of the Queen was melted, and she thought in herself, that if she could come to the service of the poor man in his troubles, God might help them in theirs too; and that the kind hearted Maharaja was sure to excuse her while he would learn of the

troubles of the poor merchant. Amongst the creatures of God, the position of a chaste wife is unique. She occupies a throne, that is only next to her Maker; and for her every thing is possible—As soon as Chinta Debi touched the boat one after another, they all floated; and there were hurras of joy! But the wicked merchant, thinking that, if perchance his boats again get aground any where, who will help him beside the woman now in his clutches? Besides a lady, who could perform a feat so wonderful, might be made ever to help him in his troubles. By sheer brute force the good Chinta was secured in the boat, amidst her lamentations and implorations. While she found her lamentations and implorations were of no avail, she, with folded hands, implored the sun in the sky, to take her bodily charms and beauty, that she might not have stood an object of temptation to any vicious man. And Master Sol, than whom there is none even in this degenerated days to be found, more helping, and to-be-looked-at-a-deity, on the face of the Earth, heard of Chinta Debi's prayer, and robbed her of her exquisite bodily charms, and granted her an old decrepit, worn out and loath-some leprous appearance.

In the meantime Sribatsa returned to his cottage after his day's labour to find his cot empty, and, the heart of his heart—the Sweet Chinta Debi, to be no where! He grew quite disconsolate, but who but Chinta, would have comforted him, cheered him and made him happy? There he had none to help him either with counsel or with sympathy. When he found that all his efforts to secure his wife was of no avail, he wended his course towards the kingdom of Maharaja Bahu Deb. He took his quarters there with a female dealer in flowers, and spent his days on devotional worship, cherishing the fond memory of his lost dear wife. In the meantime Maharaja Bahudeb announced the marriage of his daughter—Bhadra—who had ont grown to a pretty youthful age. A Svayambar (self-selection) was arranged, and lots of kings came thither to win Bhadra. But Sribatsa's luck after long awful depression, was then again on the ascendant, and Bhadra anointed the forehead of Sribatsa, who was also there sitting on the outside of the marriage pandal, as a mean fellow, with Sandelpaste, and put a garland of flowers on his neck. There arose a thundering of laughter from the assembled unsuccessful suitors of the Rajas and Maharajas, signifying the act of Bhadra, as most unmeritorious

on the part both of the bride and his father. Bahudeb, whose sense of honour and prestige, was hurt, grew furious, thinking himself disgraced before the eyes of the world, and ordered both Bhadra, and Sribatsa to live outside his royal residence, and never to enter its precincts any more. There they lived on humble fares in an humble cot, withal in exalted spirits. Time wore on, and the king became sobered down; and at the imploration of his daughter, appointed his son-in-law to be a toll collector, at a ferry over the river close by. Fortunately, one day the merchant, who had robbed Chinta Debi, was passing that way, and was secured by Sribatsa. Chinta Debi was found to have been there, and was secured. A process was gone through, and Chinta Debi regained his lost grace and beauty. The process of re-figuration, that the king personally saw, made him conclude that his son-in-law and his first wife were persons of no common order. He asked of them, with considerable warmth of feelings, to know, who and what were they. Sribatsa replied that he was the king of Oudh, and had been reduced to that pass owing to the displeasure he incurred of Sani. There was great rejoicing in his house, and Bhadra was be-decked with many a kisses, as one who was Laksmi.

It is often found that equally expert players play on dice, one always wins, another always gets worse; and no one can find out the cause. In India such discomfiture is attributed to "*luck*." The belief in "*luck*," is purely Hindoo, and makes the Hindoo undergo the trials and sufferings of the world, with stoic patience.

BIJOY CHANDRA GANGOOLI.

"DO HINDUS NEED RELIGIOUS EDUCATION?"

Æscyæm in the above excellent article mixes up social custom with Religion. In imparting ideas of reformed Hinduism to young minds, we should scrupulously avoid making social customs as one of the bases of Hindu faith. We may only lay down that certain articles of food as beef or pork, are injurious to the human constitution in a tropical country as India and therefore should be avoided. In very ancient times, beef was used as food by the Hindus, but when its injurious effects became visible, it was interdicted. A Hindu guest was then termed *goghana*, because on the arrival of such a guest, the host used to kill a fat calf for his entertainment. But this custom of beef-eating or drinking was subsequently interdicted without any prejudice to Hinduism. It is therefore apparent that social customs are not basic principles of Hinduism. Similarly we find that sea-voyage was prevalent in the palmy days of the Hinduism. The flourishing state of Tamrolipti (modern Tumlook) and Sourastra (Surat) from which merchant vessels sailed to different parts of the Indian archipelago and the Arabian sea coast attest to the fact that sea-voyage was not repugnant to Hinduism. When Hindus could thus sail freely, no strict restriction upon diet or on the mode of preparing it could be possible. Then we find in the *shastras* that in ancient times a Brahman's rice could be cooked by his intimate friend, though he might be a Sudra, or by cowherd or barber, etc. It is clear that there were no such restrictions upon the cooking of food as prevail now. Such things should not be raised now for discussion. They should be quietly left to the course of time and events.

It should be clearly imprinted upon the minds of students that food and dress constitute no part of religion, only so far that such food is to be taken or such dress is to be worn as is not injurious or indecent to the human body.

Then the writer speaks of millions of gods and goddesses and

the legends and traditions connected with them, and says that if we are to give Hindas Religious Instruction to our boys, they will have necessarily to believe and follow them. • Not necessarily, I should suppose. We may omit these from the book that may be compiled as a "Hand-book of Hindu Religion." We may proceed upon the Vedas and Upanishads and reject Puranic legends, which latter the students may read or try to understand when they come of age.

These gods and goddesses should never be confounded with the Supreme God. They are a set of created beings and are subject to frailties though fewer than man's. God created the chief gods and the lesser gods to look after different departments of His Universe, just as a king appoints his ministers and under-ministers to look after different departments of his kingdom. They are like the angels of Christianity. So these gods should never be mistaken for the Supreme God.

Æscyæm therefore may not take fright at them.

If for our present purpose we lay down only the basic principles of the Faith, we may serve our end without burdening young minds. For instance, we may say that there is only one God, one without a second, omnipotent, omnipresent and omniscient the Self-Existent, the Supreme atman; that He manifested Himself in three Forms for the creation, preservation and management of the Universe and that these three are his chief manifestations—the Trimurti, or Trinity, Brahma, Vishnu and Siva. That Brahma created the Universe, Vishnu preserves it and Siva destroys it when the Universe completes its cycle of ages, and that then new cycle begins and a new Universe is again created, preserved, and destroyed when the cycle is finished, and so on. •

I think there can be no harm in teaching these basic truths and they are the chief basic or cardinal truths of the Hindu religion which no one can deny.

Then the Question is:—(1) whether or not we should teach at this stage the many manifestations of the One?

If we omit this, we omit a vital part of Hinduism. God in his will can take at times different forms to perform his different ends. Of course, we must teach boys about Saguna Brahman, the Brahman with attributes. The Nirguna Brahman without attributes is beyond the comprehension of young minds as well. Now when we talk of

Saguna Brahman, boys will understand that the Brahman may take different shapes in which He elucidates His different attributes and performs His different ends. In this way we get the Many from the One, but we may teach only the chief gods which are the manifestations of the Supreme One. In all religions we find such manifestations of God. What are Moses, The Prophets, Virgin Mary Jesus and St. John the Baptist, if not manifestations of the Supreme God.

Just as I would invite opinions upon this Question. I would also invite opinions upon, Question (2). The retention or rejections of যাক্বাবাদ, প্রকৃতিবাদ, and অবতারবাদ subjects which would fall under Question (1).

I think we cannot reject these three, as they necessarily fall under Question 1. But what harm can there be in teaching them? I should respectfully invite opinions upon this Question too.

Our boys should have also belief in the doctrines of Re-birth and Karma and of the Evolution of the soul through the seven Lokas or worlds.

The 'Manual of Hindu Religion' compiled by Mr. R. Dutta and some others is high-priced and is not suited to our purpose. But the "Text Book on Hindu Religion" which has been compiled for the students of the Benares Central Hindu College may well be prescribed. It is already in use in several schools. I would invite *Æscyæn's* attention to this book. It is a handy little book containing the basic doctrines of the Hindu faith.

P. S.—The Rituals (important, national rites) and the Ethics of the Hindus religion should also be taught, the latter fully and elaborately.

AN HUMBLE INQUIRER.

• SONTHALIA •

OR ABOUT THE SONTHALS—THEIR WAYS AND HABITS OF LIFE AND CUSTOMS. II.

In my first article published in the *National Magazine*, for September 1902, mention has been made of 12 classes into which the Santhals have been divided. These are (1) Kiskoo, (2) Moor-moo, (3) Marandi, (4) Saren, (5) Baskai, (6) Hembrom, (7) Beshra, (8) Hausda, (9) Toodoo, (10) Dondka, (11) Chaunia, (12) Gondwar.

2. Among them, the Kiskoo was formerly the ruling class, the the Moor-Moo served as the priestly class, the Saren was the military class, the Marandi, trader. These were the four superior classes. The Baskai, Hembrom, Beshra, Hausda and Toodoo occupied the middle position in the Social hierarchy; the Dondka, Chaunai, and Gondwar were the three lowest in the scale.

Each of the above 12 classes had four subdivisions, thus making 48 subdivisions. But their names could not be ascertained.

3. TOTEMS — The Totem of Hausda was হাঁস Goose.

—	Moormoo	— Nilgan
—	Gondwar	— Ganda (গেঁড়া শুগলি)
—	Saren	— Sal fish
—	Hembrom	— Betelnut
	Chaunia	— Gudika snake
	Marandi	— Munda grass.
—	Kiskoo	— Golden eagle
—	Toodoo	— বিজাচিচিলা (vegetable)
—	Dondka	— Monkey

4. ORIGIN — The Santals have a tradition of their origin. Their first parents were born from the egg of the Has and Hasooli. These were sea-birds, Has was the male and Hosooli, the female. The earth had not been created then but there was only water pervading space, upon the foamy crest of the sea-wave

the female bird laid two eggs. After sometime the eggs were placed, from one came out a son and from the other a daughter; the infants were tossed to and fro upon the crest of the wave. They were fed by the parent birds. They were reared in their way till their 12th years. For this reason their descendants are called the family of Kherual.

The creation of the earth took place after their event. She was clothed with grass, herbs and creepers, and peopled with lower animals, such as, the horse, cow, goat, sheep, etc. Oon Hun Gossain Marangbooroo, the tutelary deity of Santaly, brought the two children to land from the water upon which they were floating, and bade them eat roots and fruits. But before eating them, they should first offer them to him (the god). The Gossain then went away, but after the lapse of sometime came again and instructed them the recipe for manufacturing Handia, the favourite beverage of the Santaly. Drinking this they got intoxicated and felt sexual desire. Many sons and daughters were born to them in time, when population had increased in their way, the Gossain came again and divided the people into classes named before.

5. PRECEDENCE IN RANK HOW DETERMINED NOW.—The precedence in rank of these 12 classes is even now determined from the five ghats of the Damodar river into which they throw the bones of their deceased ancestors. These five ghats are Sunamohi, Telkupi Gaiya, Tiriyo and Ghoradanga. The Ghoradanga ghat is the lowest in situation, and there the three lowest classes Dondka, Chaunia and Gondwar throw the bones into the water and offer *pindas* to their ancestors. They have Brahmin priests only on those ghats who officiate in those ceremonies. The different ghats are reserved to classes according to their respectability.

6. SRAD—Nine or eleven days after death, they go through the purification ceremony, offer *srad* and treat their caste-fellows. As they have no priest, Napit (barber) Dhoba (washerman) and Vaisnava, they select these functionaries for the time being from amongst themselves. The Barber and Dhoba help in the purification, and the priest and Vaisnava help in the *srad* ceremony—*i.e.*, *pujah* is offered to Oon Hun Gossain Marangbooroo, oblations of Handia are poured to him, and cooked flesh and food are offered to him in the name of the deceased. Immediately after the

conclusion of the ceremony, the barber and washerman spend the perquisites they have earned in feeding the punchayet, they carry not a pice to their home, lest they be doubted as permanent barber and washerman and thus become degraded in society.

7. The Santals wash their own clothes, their women do this work and as for shaving they help each other.

This is worth while mentioning here that respectable Santals have their own Vaisnava priest or Guru, though the Santals as a class have not.

8. It has been said in the first article, that forty days after the funeral, the relatives of the deceased search for the largest stone they can find and carry it amid great rejoicings and bonfires to the head of the tomb and place it there as a tomb-stone. The Koles are very strict in the performance of this rite. At Nowjor, a Kole village in the Bamunghatti Subdivision of Mourbhang, a tomb-stone—one entire piece—measuring about 18' x 15' is placed horizontally, supported on loose stones in the four corners. The Kole villagers regard it with reverence and use it as a meeting place in evenings. They consider that it is hallowed by the dust of the feet of the guests who repair thither. This is a Kole movement.

9. FORM OF GOVERNMENT WHEN INDEPENDENT—The Santals say that they were formerly independent that they ruled themselves, each class performing the functions assigned to it (*vide* para 2). Their lands were communal property, they were parcelled out among themselves and each man cultivated his own share of lands and enjoyed the harvests thereof. But they have been degraded to their present position by Mirza Musalman. Who this Mirza was it is difficult to ascertain.

10. It is said to observe that the poor among them on being gradually ousted of their lands by the keen competition of the modern day and by that arch mischief-maker the Buniya. Their characteristic laziness is the cause of this disaster. It is painful to reflect that a day is coming when many of them will be landless.

11. WARDING OFF DISEASE.—Among the Santals when Cholera breaks out, it is the custom for every household to sacrifice a hen to Jogini—Ola Davi—, or to carry broken pots, broken winnowing fans and broomsticks in the night or before dawn to

a cross-road out of the limits of the village and there worship Jogini and sacrifice a hen to her, or simply leave those things there.

12. In Small-pox epidemic, they now sacrifice a goat or hen to Sitala Davi. The Ojah is consulted, he directs the mode or place of sacrifice. Sometimes the Ojah makes incantations to the goddess and conducts the worship and sacrifice within the village or sometimes in the jungle. , But there is no visible images of Sitala Davi.

13. In any uninfected village, the 'Prodhan or Naik offers to the Gram-Duvi to keep off the disease. In any cattle epidemic he does the same too, and the Ojah also offers pujah and vows.

R. D. CHUCKERBUTTY.

CHRISTMAS.

THE time is solemn, but it is not sad ;
The dim descending year may cast its shade
Across our path, and tempt us to lament
The loss of brighter, greener days ; but still
The heart appeals to that which cannot die,
And now is open most to charity.
For love is a perennial plant, and blooms
Alike in every clime and every soil :
But this her special season. Not when spring
Warms the young blood, and stimulates the force
Of appetite and fancy, but when all
Th' unbroken family are met once more
Around some well-known hearth, and give the rein
To household pleasures. Draw the curtains close
And pile the blazing fire. Check not the clear
Bright laugh of childhood ; but call young and old
To festive gambols. Spread the table well
With hospitable cheer. Let genial Mirth
With Innocence go hand in hand. Now drown
Each rankling grievance in the rising tide
Of deep domestic happiness. Forget
The fierce anxieties of life. Forget
The dreary world without, or give more thanks
For comforts so contrasted with its gloom.
But oh ! remember such as share them not ;
Amidst thy banquet think upon the poor,
And grudge them not their portion, lest they cry
To heaven against thee, and so shut the gates
Of mercy on thy prayer. Fear not that God
Will frown upon his children's pastime. Go,

Enjoy his bounty freely, but withal
Show mercy to his creatures. Nay, thou churl.
Scan not their faults too sharply, unless thou
Thyself art faultless. But consider well
They are Christ's legacy. Thy gifts to them
Are by himself endorsed. To send away
A suppliant is to turn *him* from your door.
With these—the open heart, and open hand—
E'en freezing winter has its joys.
Come then, and let us learn to kneel awhile
Around the death-bed of another year,
And think how God has led us, by a way
We knew not, through the wilderness of life ;
Has taught our ignorance, has heard our prayers,
Has healed our sorrows, and relieved our wants,
Crowned us with mercies, shielded us from foes,
Has given his Son to suffer in our stead,
Has sent his spirit to renew our hearts,
And opened immortality to man.

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FRENCH AGRICULTURAL NOTES.

The recent long spell of cold weather has, it must be confessed, been beneficial to artificial incubation, and since necessity has no law, may also explain why so many poultry farmers in this country—despite their dislike for this kind of hatching—have had to fall back upon the method in question. Judging by the several good results obtained on the present occasion, opposition is less general than formerly. The conclusion to be drawn from this observation is that the purchase of an incubator is next to an absolute necessity, as cold weather retards laying: and as the production of chickens for the market at an early date is always the aim of poultry farmers, nothing remains but to invest in an artificial hatcher. By doing so, as early brood is secured, which will not interfere with natural hatching; during warmer weather, meanwhile, income will be doubled. A case is recorded of a farmer who relied upon artificial incubation; at the beginning of last spring he was able to boast of possessing by this means one hundred chicks, to say nothing of others which were on the eve of being hatched.

A great deal of the apathy existing about artificial incubators is attributed to inferiority of their make. Up to the present day very few persons were able to speak well of them, though the ancient Egyptians have great faith in such apparatuses. Whenever manufacturers are upbraided for turning out a faulty incubator they not only deny the soft impeachment, but retaliate by declaring that purchasers are too often ignorant how to work them properly. The quality of the eggs is quite as likely to be the cause of the failure of the experiment; if the eggs are bad, the best machines in the

world, are of course unable to improve them. It should never be forgotten that the whole secret of artificial incubation consists in employing the freshest of eggs. The same results cannot be expected from eggs eight or ten days old, as if but two or three. In the case of foreign eggs, if the latter were not new laid at the time of packing, and incubated twenty-four hours afterwards—the regular period of rest after transit—upon a bed of grain, the hatching will prove defective in consequence. Outside the question of freshness, the strength and age of the reproductive agent counts for much. For instance, experience has proved that pullets of a pure breed under twelve months old, will lay eggs yielding less fine and robust chickens than those of hens aged from one to three years. The finest chicks are those hatched by hens from fifteen months to three years old. In the case of cross-breeds and those enjoying full liberty, very fine and healthy broods can be expected from them when aged only ten months.

Hatching is considerably affected by liberty being accorded to fowls; the eggs laid by those allowed to roam in fields, and those restricted to the yard, are quite different—more so even than many imagine—no matter how well-fed both may be. The best of nourishment never equals out-door exercise; it is only when hens are given a free scope, that they are able to vary their food according to their fancy. Cross-bred fowls, not in the enjoyment of complete liberty, have been found to lay eggs much more suitable for the purpose of incubation than hens of a superior breed under the same conditions. What is understood by select races are those entered for show competitions, with whom the question of perfect plumage and shape indispensable; these qualities are only obtainable by avoiding cross-breeding. On the contrary, when the objects in view are either an increase of eggs, or the rearing of birds for the table, the races remain very rustic, all cross-breeding being tolerated, as form and plumage are in this case immaterial.

Is artificial incubation a success? One farmer alleges that in the same apparatus he placed, on the 23rd February 1904, thirty-one eggs belonging to cross-bred hens which had been kept in a yard and allowed the run of the manure heap; twenty-nine eggs were from several races, comprising Dorking, Longshan, and Faverolles, which had been confined to coops, thirty-four eggs, the produce of Faverolles hens that had travelled, and whose eggs had

not been placed in the incubator until four days after their arrival. The following results speak for themselves:—the thirty-one eggs from cross-bred fowls yielded twenty-seven chicks, all fine and robust; the twenty-nine eggs from the various three races enumerated gave ten chicks, four of which were deformed, and died three days after birth. The thirty-four other eggs from Faverolles hens yielded seventeen chicks, of robust appearance. Among the first category of eggs, there were two clear, two embryos, which only developed a few days later, and one chick dead in the shell. In the second lot of twenty-nine eggs there were ten clear eggs, seven dead chicks in their shells, having consumed the yolk, and on the eve of coming out, as well as two embryos, from seven to ten days old. Finally, out of the thirty-four Faverolles eggs, there were four clear eggs, eight embryos which lived only from eight to fifteen days, and five dead chicks in their shells, of which three had absorbed the yolk.

Experiment further established that cocks of noted breed suffered very severely from the long spell of winter, which accounts for so many clear eggs, and weak embryos being discovered. Other eggs laid in the same yard, but which were not submitted to incubation until a later date, gave much more satisfactory results, though under the average of the yield obtained from cross-bred hens. These latter remarks illustrate very forcibly that it is absolutely necessary to secure fresh eggs before attempting any artificial or even natural hatching. Good eggs will succeed in an inferior machine, but as already observed, the best of incubators will be unable to hatch inferior eggs. None the less, never hesitate to purchase a first-class machine, as a defective incubator will prove very disappointing; even when good eggs are provided—the results may vary from 40 to 60 per cent. Incubators provided with regulators are recommended as being the best. Make sure, before purchasing such, that the regulator works well. The temperature of a good machine should vary but slightly throughout the whole incubating period—only from 1 to $1\frac{1}{2}$ degrees, never more. Humidity should be rationally and uniformly distributed; the section in which the drawer is located ought to be properly ventilated while the eggs cool. Too many persons err under the impression that it is quite easy to construct a *convense* or incubator; they often find out their mistake when it is too late. The law is very severe upon dishonest tradesmen selling next to useless machines at a high price. Purchasers are cautioned not to

buy too cheap an apparatus. Satisfactory results can only be expected from first-class machines.

As a final remark—outside the question of freshness of eggs and fine quality in the mechanism of the apparatus—personal proficiency is equally as important, if not more so. Among the fundamental rules to be strictly observed are:—earnestness, ability to properly read the degrees indicated* by the thermometer, and to turn the eggs well at regular hours. These points well attended to, success will follow, and all the year round, chicks can be the result. As will be seen, artificial hatching is not so insignificant as many people imagine to be which may explain why incubators have returned to favour with a sort of a rush in France.

E. C.

*HINDU METAPHYSICS.**I.*

DIALOGUE BETWEEN A BRAHMAN AND AN EUROPEAN.

* * * * *

Eur. I must confess that some of your metaphysical notions do appear to me altogether extravagant, and, without wishing to use the term disrespectfully, absolutely absurd.

Br. Will you be pleased to state some of those absurdities, and we will examine them together, and it may perhaps then appear that the absurdity is not so much in our admission of these notions as in your rejection of them.

Eur. I think I heard you say that you belonged to the Sankhya School?

Br. I said so.

Eur. That School, then, attributes to mind a power which it does not and cannot possess; of which we have no evidence either from our senses or from history; which would be utterly useless to all the practical purposes of life.

Br. You are somewhat severe in your animadversions on the Sankhya philosophy. Now, as you are so positive as to what mind is incapable of doing, you can probably tell me what it is capable of, and what is its nature?

Eur. Very little can be known of mind, for mind itself is that which knows, and not what is known.

Br. But mind has power, and can use that power, and may know its own power by the result of its own efforts. I am of Patanjali's school (the theistical), and I ask what are your notions of the attributes of the great spirit that supremely rules the Universe?

Eur. I attribute to him infinite power, infinite knowledge and wisdom.

Br. Then you suppose the wisdom and the power of the Supreme equal?

Eur. I do.

Br. If then, you admit that the wisdom and power of the Supreme are equal, have you any reason to suppose that the wisdom and power of created beings are unequal?

Eur. Do you mean by this question to imply that in man wisdom and power are equal, and that according to our wisdom so is our power, and according to our power so is our wisdom?

Br. That certainly is any meaning, and that is my belief.

Eur. I see no reason why it should not be so.

Br. I see every reason why it should be so for that which is all powerful is all wise, and that which has no power has no wisdom.

Eur. I will not gainsay it. I wish not to quibble, but to inquire.

Br. Can the mind gain strength?

Eur. Of that I should think that there can be little doubt. The constant efforts of intellectual powers are directed to strengthening and enlarging the mind.

Br. That is to say, increasing its power?

Eur. Clearly so.

Br. You see and are convinced that power and knowledge are coincident in their increase?

Eur. I see it.

Br. Then I would ask you, can you set any assignable limits to the improvement and enlargement of mind?

Eur. Most certainly I cannot, but at the same time not admit—

Br. Nay, nay; I beseech you not to perplex the subject by digressions. I only ask you to tell me what you will admit, and not what you will not admit. You will admit that in man power and wisdom are respectively equal, and that one cannot be increased or diminished without a corresponding increase or diminution of the other?

Eur. But to what consequences will all this lead? I fear I have conceded too much. Surely a man may have more knowledge than power.

Br. I thought it was a principle laid down by your great philosopher Bacon, and generally admitted by the people of England and France, that knowledge is power.

Eur. To a certain extent perhaps it may be so.

Br. If the extent be certain, perhaps you can state to what extent?

Eur. Ah, you are laughing at our conversational peculiarity, in using the word *certain* when the thing of which we speak is uncertain. But I will concede that knowledge certainly give power.

Br. Will then, a little knowledge gives a little power, a great deal of knowledge, a great deal of power?

Eur. So it should seem indeed.

Br. By what argument, then will you shew, that if increase of knowledge be increase of power, the increase of power does not keep pace with the increase of knowledge?

Eur. I have, indeed, no argument for such purpose. But still, though as knowledge increases power may increase, it does not follow that they are absolutely equal.

Br. You may for your own purposes think so, but I cannot imagine how you can with your own principles prove it; for if you admit that where there is all power, and where there is no knowledge there is no power, and you will be puzzled to shew how knowledge and power do not always bear the same proportion to each other. Permit me to illustrate. You can suppose gradations of power and knowledge between all and none?

Eur. I can so.

Br. You can also suppose a progression from none to all?

Eur. Most undoubtedly.

Br. Very good. Then if, in the course of this progression, increase of power keeps pace with increase of knowledge, and if at any period of the progress there should be more knowledge than power, how can the knowledge and the power ever both arrive at the infinite? Seeing that, let then progress as far as they may, the power must always, if ever, be inferior to knowledge, and if knowledge merely produces a degree of power, then, when knowledge at its infinite height has produced a power that is not infinite, it can do no more. Do you not, therefore, see that, if power and knowledge are equal at their greatest height, and that they can increase by degrees, they must be equal in every step of their progress?

Eur. I believe I must acknowledge it.

Br. Having thus laid the foundation, we will now, if you please, proceed to consider any doctrines of the Sankhya school to which you may object; for, unless we be agreed on first principles, all our reasonings and arguments will be but as fighting with air.

Eur. I should premise that my knowledge of the metaphysical

doctrines of your school is derived from the report of others ; but still the reporters are in every way so competent, that I think I may regard them as undoubted authority. I have read the following statement of your doctrines, and to my mind they are all equally objectionable. "The Sankhya school consider that there is a transcendent power attainable by man, which is eightfold ; 1, shrinking into a minute form ; 2, enlarging to a gigantic body ; 3, assuming levity ; 4, possessing unlimited reach of organs (as touching the moon with the tip of the finger) ; 5, irresistible will ; 6, dominion over all things ; 7, faculty of changing the course of nature ; 8, ability to accomplish everything."

Br. Right ; those are doctrines of our school : now, what objection can you have to anyone or all of them ?

Eur. Excuse me, but really I can scarcely avoid smiling at the gravity with which you seem prepared to defend these extravagancies, and I may say impossibilities.

Br. Excuse me also, but it does not become you to call these doctrines impossibilities, after the concession which you have made of the possible unlimited enlargement of the mind.

Eur. Yes, the enlargement or improvement of the mind must, be admitted ; but you are speaking of the enlargement of the body and of its as miraculous diminution.

Br. Certainly I am ; and has not sound power over matter, and did not mind create the universe ?

Eur. That may be very true :—but I will ask you one question, which may presently set the matter at rest. Have you ever seen, or heard any authentic account of, any philosopher of your sect thus enlarging or diminishing his body ?

Br. An answer to that question by no means sets the matter at rest ; for although I should say that I had never been witness of such a fact, and had never seen one who had, that would not prove the thing impossible. Have you seen everything done which is possible to be done ? Is it possible to leap from this window into the street ?

Eur. Certainly it is.

Br. Have you ever done it, or have you ever seen any one do it ?

Eur. No ;—but by the universally admitted laws of nature, by one's own feelings, one must know the possibility of it.

Br. In like manner may I say, by the universally admitted

principle that knowledge is power, by the acknowledged principle that the mind may go on progressively improving to an inconceivable and unlimited extent, and by one's own feelings of the power of mind over matter, one must know the possibility of this transcendent power, which the Yoga-Sastra of Patanjali affirm to be attainable by man.

Eur. Still, if you could give us a little ocular demonstration of these things, it might tend more to our conviction than the most subtle reasonings. You say that it is possible to attain an unlimited reach of organs, so as to touch the moon with the tip of the finger;—now the moon is much higher than the ceiling of the room in which we are sitting, and yet we think you will never be able to touch that ceiling with the tip of your finger. If you could only show me now that you can reach to the top of this room, you would go some little way to convince me of the verity of your pretensions.

Br. Ah, my good friend, and if you would only jump half way out of this window into the street, you would convince me of the possibility of jumping the whole way.

Eur. Verily, I should convince myself too, and that with a vengeance. But now, to speak seriously, I beg that you would consider the difference,—that which you desire me to do is dangerous and inconvenient, and I have no wish to break my week.

Br. And I have no wish to touch the ceiling of this room.

Eur. At this rate, you may affirm anything you will as being within the compass of human power, and then, when asked for a practical demonstration, you may decline it, as being not within the range of your wishes.

Br. Truly, it appears to me that you are of the Sankhya school yourself, and that you believe in the transcendent power that is attainable by man; for you admit that knowledge is power, and that knowledge, and consequently power may increase to an inconceivable degree, or, in other words, to a certain extent, which you afterwards acknowledge to be uncertain.

Eur. Yes, yes—but there must be some limit, though I may not be able for a certainty to say what that limit is.

Br. To prove that there is a limit, you must show, by reasoning the necessity of a limit, or you must adduce instances of those who have reached the limit.

Eur. Why reason and experience may suffice to make as pretty

certain that no mortal being can ever touch the moon with the tip of his finger. I am aware that you include *affirmation* amongst your demonstrative evidence.

Br. I cannot tell what reason may do, but how can you say that experience may convince you? Have you ever known any individual so far exert the power of his mind, as to endeavour to touch the moon.

Eur. No,—and if anyone had ever made the attempt, I should have thought him mad for coming at an impossibility and a thing altogether useless and undesirable.

Br. As for the matter of impossibility, you cannot pronounce upon that, for nobody knows what he can do till he tries; and as to the undesirableness and inutility of the thing, you have furnished yourself with an answer to your own objection, when you asked me to touch the ceiling with the tip of the finger. There is a difference, you see, between what is the desirable and what is impossible. You people of Europe are so much taken up with material things, and with matter that concern the body, that you have no time to think, at least with the depth and refinement of the Hindus.

Eur. Indeed, you do us great injustice, and give a very unfair representation of European intellect. The English are emphatically called a most thinking people.

Br. Indeed! Do the English think as much as they possibly can?

Eur. I will not go so far as to say that, but I think I may venture to say that, there are few, if any, people who think men deeply and profoundly than they do, for the most part; our mathematicians and metaphysicians have manifested striking proofs of deep thought.

Br. In this method, I think you rather flatter the English people, for they have so many pursuits of wealth, ambition and amusement, that they seem to have no habit on continuity of thought, but they fly from one topic to another, and never dwell on anyone long enough to have any single idea developed in their minds. They have too many books to read, so that instead of being occupied with their own thoughts they are altogether taken up with the thoughts of others, which after all are no thoughts, but merely words in the place of thoughts. I have never heard of any Englishman spending forty years absorbed in one topic of thought, and not

diverting his mind from it a single moment during the whole period. How then can you imagine that they can think profoundly, if they do not think continuously ?

Eur. Ah, my good Sir, I can really see no benefit from this abstracted and dreamy kind of reverie of which you now speak. It rather bewilders than strengthens the mind, and it leads to those strange vagaries, which you call the doctrines of the Sankhya school of philosophy, and such like extravagancies.

Br. Which extravagancies, let me remind you, you have not yet refuted—But suppose now I should shew you that you have had a philosophy of the Sankhya School in England, and not merely unprofessing the doctrines of the school, but one who has practically exemplified them in his own person ?

Eur. Indeed, if you should show me that, you will show me which will astonish me as much as if I should now see you touch the ceiling of this room with the tip of your fingers. May I ask his name ?

Br. His name was Lemuel Gulliver.

Eur. Pardon me, my good friend, but you are altogether in an error as to that matter. There never was any such person in existence as Lemuel Gulliver, and those novels which go by his name were mere political satires, written by an Irish clergyman named Swift.

Br. How know you that ?

Eur. Everybody says so ; there is no doubt about the matter.

Br. Thus, if you were to live among the Sankhya philosophers, you could believe in their doctrines ; you would say. "Everybody says so ; there is no doubt about the matter."—Now you must permit me to say, that you Europeans have a strange way of regulating your belief ; but what everybody says—the fact is, you do not think for yourselves ; you let other people think for you. How can you ever get at the truth without thinking ? Some of you, indeed, may think with great readiness, but you do not think profoundly. I see that you really know nothing about Lemuel Gulliver ; so you may take my word for it he was a practical philosopher of the Sankhya school, so that he did at one time shrink into a minute form, and at another he enlarged himself into a gigantic body.

Eur. I must be permitted to say that it seems to me that you labour under a little error in this matter, even supposing and ad-

mitting the literal truth of Gulliver's travels; for he does not represent himself as undergoing any change as to his own body, but as visiting at one time people of very small dimensions, and at another time dwelling awhile amidst a race of giants.

Br. Very likely it may so seem to you who are not accustomed to the Hindoo philosophy, but I can see that Gulliver was a philosopher, who took this mode of introducing the knowledge of the system to his own countrymen. He very strictly and carefully tells you in what part of the globe these islands are placed, in order to induce other people to visit them, so that, when they find the inhabitants to be of the usual dimensions they may enquire into the cause of Lemuel Gulliver's mistakes, and then he led to acknowledge of the transcendental doctrines of the Sankhyä School.

Eur. Truly, your theory is more ingenious than convincing.

Br. Europeans cannot be convinced, for they do not think.

Eur. Nay, indeed, the more I think the more I seem opposed to your philosophy. Your notion concerning Lemuel Gulliver is clearly an error, and is as fanciful as the test of your opinions, and I could almost imagine that you design your whole argument as a piece of amusement, or an exercise of the wits. For do you really imagine that, if these things were in the power of me, we should not frequently, at least occasionally see instances of the exercise of that power? Should we not sometimes see people touching the moon with the tips of their fingers?

Br. You do not know what they may do when you are absent or asleep. But still, though it may never have happened, you do not know that it is therefore impossible. Perfection in our philosophy requires greater time and sacrifices than men are in general willing to bestow upon it. Do you know that it requires much effort and patience, and many sacrifices in moral affairs, to conquer evil habits and subdue the mind to obedience? You think this possible and desirable, and yet how few people accomplish it! Now, though you might think it desirable for the extraordinariness and singularity of the thing, yet peradventure you might not think it so very desirable to give up, for the sake of it, all your possessions, amusements, and human interests.

Eur. I will indeed acknowledge to you, that I do not think touching the moon with the tip of my finger to be very desirable as to surrender everything else for the sake of it.

Br. Well, perhaps not:—I also am of opinion that there are many things in life far more desirable to touch the moon with the tip of my finger ; but we are not to imagine it therefore impossible, any more than we are to suppose it impossible for a man to conquer evil habits, because he finds it more pleasant to continue in them than to subdue them.

Eur. You have not convinced me yet I must converse with you again on this topic.

Br. Most willingly, when it may suit your convenience.

A. J.

*PHILOSOPHY OF THAT MYSTIC VEDIC SYLLABLE,
'AUM.'*

INTRODUCTORY.

I.

What is in a Word? That is the first question which a philosophical critic puts at the outset of his enquiry, and the answer he is sure to get is, what not? Word is the prime mover of social and political worlds; countries are devastated, armies are swept away, nations are revolutionized and remodelled. Our science, our faith, our religion all move up on Words. We attach local and conventional meanings to them and they are transformed into living symbols of our inner life. These are but our common-place words, which are changed and transposed as time goes by, artificial juxta-positions of symbolic letters,—letters having no significations by themselves, but purely conventional.

The childhood of the Human Race is conspicuous by the coinage and presence of words which are universally the simplest possible conglomeration of sounds but bear the highest metaphysical import even at the present day. They not only expound the truth, the highest truth, but in their very constitution contain all that is necessary for the attainment of the same. Let us for instance examine the coinage and constitution of a word—the simplest combination of sounds imaginable, which shall contain the following significations:—

1. Man with his several modes of consciousness.
2. Man as he is, and his relation to the *world* and the Absolute.
3. Man in his true essence, and how to reach that essence of Being.

These three problems contain in a nutshell, the problem of human existence and of spiritual evolution which has engaged the intellects of the past and the field of contention of modern phi-

losophers; and the unique word we are required to coin is *Aum*. Try as hard as we might, there is no other word to be found containing such transcendent imports in all the languages of the world. Nothing but impartial enquiry can lift the veil of mystery which surrounds the true meaning of *Aum*. In reality, it is not a word composed of three letters, in the ordinary sense of the term. It has its origin in the universal reservoir of natural sounds. It is a transcendental entity, containing the true essence of Being.

Those who consider the word *Aum* as a relic of Vedic heathenism, analogous to the barbaric chants of the juggler, resolved into flimsy and "meaningless twaddle" under the scrutiny of the scientific analysis, should do well, before they pass their decisive judgment, to look at it, at least, from its historical standpoint, or from the comparative philological point of view. A syllable, so much extolled by the Indian sages, the philosophers of the Age of Upanishads, the writers of the Puranas and Tantras and even the Law-givers, Manu, Yajñabalka and Parasara, cannot but be of great and intrinsic worth, at least it might have appeared so to them; and it is better in the name of the impartial spirit of scientific research to examine it from their point of view. Whether the standpoint taken by the vedic philosophers does seem to us well grounded or not, is a question which can only be disposed of later on. The Vedanta philosophy has a very solid foundation and has verily withstood the test of ages, even that of the Kantian Age of Criticism. The symbol *Aum* is identified with the fundamental principle of the Vedic philosophy and religion, without which the Hindu Religion is reduced into nothing but a name denuded of its transcendent individuality in the religions of the world. It is a great wonder that the Oriental scholars, whether for ultimate good or evil, attempt to decide the merits and demerits of the principle of the Vedantic religion without a passing glimpse at the "sacred syllable Om," (Max Muller) which is considered as the concentrated embodiment of the principles of Hindu Religion. The judgment is passed before examination and partial inquiry produces dire results in the philosophical exchange of Europe. The antiquities of India shorn of their innate and intrinsic worth are thus exhibited by the antiquarians in curiosity shops, explained to the philosophical customers with

strange fantastic theories, indicted without a defender and remanded to the shelves of the Oriental Libraries, as prehistoric fossils—only as additional links in the Evolution of Language and Thought. Nothing more!

History repeats itself here under a different and curious guise. The depredations of Ghazni and Ghorî were against the concrete images of gold and silver in the temples and sacred places of Hindustan, the physical emblems of Hinduism. Speaking generally the depredations of Oriental Scholars are against the abstract principles,—the foundation of Hinduism; hence they intend to strike deeper. Instances of such depredations are not rare but numerous. Whatever may seem to be the proximate advantages of "unearthing the remnants of the most ancient religion," the remote advantages are truly prejudicial to the real interests of Religion.

II.

In the *Calcutta Review* (Vol IV. 1845, pp. 52-55) Mr. H. T. Colebrook has endeavoured "to bring home to the English educated mind a complete and systematic conception of the Vedanta or Advaita philosophy," and in doing so, he has fallen into grievous errors first in considering the Advaita problem from the standpoint of dualistic Christian Theology, and secondly, in not properly understanding the true connotations of certain terms used in the Vedantic philosophy. His spirit of inquiry is not that of an earnest and impartial student of philosophy but that of a stern Inquisitor prejudiced from the very beginning against everything connected with the higher aspects of Hinduism and which seem to be above the level of his own Theology. Fostered in an atmosphere of Christian dogmatism in which still lurks the fatal scepticism of the Middle Ages, he has blinded himself with the idea which proves to be prejudicial not only to a proper understanding of the subject in question, but also to the interests of humanity in general, that the Christian dogmas must be the standard for the calculation of the merits and demerits of the principles of other religious creeds, without calling into question the *sine qua non* of the dogmas he himself holds and for which he is personally responsible. In the ardour of self-imposed task of unearthing the discrepancies of the Vedanta philosophy, Colebrook from the very outset could not understand the real meaning of the fundamental formula of Vedantism (*Tat tam asi*) "That

thou art" or in another way, "I am God" (*so ham*). "The positive tendency of the system," says he, "is to fill the mind with the greatest arrogance. It teaches every man to say, 'I am God,' 'it is God that is in me;' and as such "no repentance for sin" is at all possible. Over and above this he finds a deplorable want of moral standard by which actions are to be weighed.

Before entertaining any such misconception as stated above, Mr. Colebrook should have impartially examined the contents of the terms 'I' and 'God' as used in the Vedanta philosophy. 'God' as used here does in the Vedantic sense mean Brahman, the infinite absolute self. Nowhere in the *Vedanta Sutras*, the *Upanishads* and the *Gita* does 'I' in the proposition *so ham* (I am that) signify an individual entity, generally called *man* with hands, feet, mind and individual consciousness; but this meaning Mr. Colebrook has the misfortune to adopt. In the *Panchadasi* (slokas 43-52, ch. I) and in all the commentaries of Sri Sankaracharyaya it has clearly been explained admitting of no ambiguity, wherein lies the consistency of 'I am that,' 'That thou art,' and where not. Prof. Max Muller is more clear on this point. "When we speak of the self, in Sanskrit Atman, we should always remember that it is not what is commonly meant by the ego, but that lies far beyond it. What we commonly call our ego is determined by space and time, by birth and death, by the environment in which we live, by our body, our senses, our memory, by our language, nationality and many other things." (*Lectures on Vedanta Philosophy*. p. 88). If therefore the ego, the 'I,' the individual consciousness, is not the *Atman*, but the ego when freed from the limitations imposed by the personality, no one can consistently say, 'I am Brahman' unless he has, practically, and not theoretically, realized the true essence of the 'I,' i. e., the 'I' devoid of its limitations. The positive tendency of the system, therefore, is never to teach every man to say 'I am God.' "A very strict moral discipline is enjoined on every body before he is allowed even to approach the study of the Vedanta" (*Ibid* p. 163); "and that all authorities teach that no one could possibly enter into its spirit who has not previously subdued the passions and ambitions of the human heart." This method surely, on the face of these strict rules of guidance of human conduct cannot be misconceived to be a principle of morality which "fills the mind with the greatest arrogance."

III.

Let us now turn to the writings of the late Prof. Max Muller.

With due deference we are compelled to acknowledge that Prof. Max Muller is not free from that misconception which has become somewhat constitutional, as it were, with the Oriental Scholars, and his, we are sorry to say, was not an impartial spirit. The subversion of all other religious spirit and the spreading of Christianity was his only aim. This was the end which actuated him to publish his *Chips from a German Workshop*, and to undertake the editorship of the *Sacred Books of the East*. "Those who have studied the ancient religion of India," runs his view, "in all its aspects, philosophical and mythological, historical and pauranic, consider it to be a store-house of materials for the students of religions, deciphering with patience and perseverance its ethnological character, so that a comparative study of the religions of mankind will be of the greatest assistance to the spreading of Christianity; and the science of Religion will for the first time assign to Christianity its right place among the religions of the world; it will restore to the whole history of the world, in its unconscious progress towards Christianity, its true and sacred character" (*Chips*, Preface p. XX). "They think that this study of the ancient Religion of India will not place it in the foremost rank but they will learn to appreciate better than ever what they have in their own religion, and, will learn what Christianity really is" (*Chips*, Vol. I., p. 49, also p. 54). As regards the fixing of the date of *Rig-veda*, he was loth to place it at so very early a date, and he could "hardly understand how, at so early a date the Indians had developed ideas which to us sound decidedly modern." He is frank enough to confess that he should give anything and hazard anything to save the honour of the Christian Civilization, to remove the shame of its being of so modern a date, if he "could escape from the conclusion that the collection of the Vedic Hymns, a collection in ten books, existed at least 1000 B.C. that is about 500 years before the rise of Buddhism." He did not mean to say, and he did hope to find one loophole to extricate the European nation from the difficulty, "that something may not be discovered hereafter to enable us to refer that collection to a later date." (*What India Can Teach Us*, pp, 111-112).

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IV.

If such is the tenor of the undercurrent-sentiment of a man like Max Muller, we have feeble chance of getting full and complete justice at the hands of Oriental Scholars; and it is no wonder that the "mysterious syllable Om" should not have a better fate. If it has a mysterious and an important aspect requiring better acumen for its comprehension and further evidencing the transcendent nature of the Vedic religion, the Oriental Scholar would escape from the difficulty of unearthing the mystery himself, "to save the honour of the Christian Civilization." To accept those which can easily be comprehended by the European Scholars and moulded according to their own idiosyncracies, and to reject every other things which they are unable to explain, is surely not a scholarly and an impartial method of studying an ancient civilization. Nobody can fully enter into the spirit of the Upanishads, says Max Muller, unless he rejects the sacred syllable *Aum*.* For, according to him, not only "there is plenty of wheat in the Upanishads, but there is plenty of chaff," and "it is not likely that anybody can truly appreciate the wheat, who cannot also reject the chaff." In his endeavour to truly appreciate the 'wheat' he has found sufficient evidence to reject the syllable *Aum*, as chaff, a nonsense, and a "mere twaddle at least in its present form." It seems to him possible that originally there was "some sense" in all the nonsense that we find in the Upanishads about the syllable *Aum*. This word might have had a meaning which he does not detect in its present form. He can squeeze out a meaning if he is allowed to distort it into a contraction of *avam*, as contrasted with *ayam*; and at last he suggests, that the word has some similarity with the word *Amen*. It is beyond our comprehension to form any adequate estimate of the enormous mistake committed by the late learned professor in attributing such a meaning to the word *Aum*, the important significance of which is co-equal with the fundamental doctrines of the Vedanta philosophy. The word is scattered all over the treatises on Vedanta and it has been expressly enjoined in the Gita and the Yoga philosophy as the best means to attain the highest spirituality. Our astonishment is further increased by the fact, that while the *Mandukya Upanishad* with its *Karika* by Gourapada is exclu-

* Max Muller pronounces the word *Om*. This is not correct.

sively devoted to the exposition of *Aum*, Max Muller has endeavoured to decipher its meaning by a far-fetched, nay, an impossible relation, with another word meaning 'yes' occurring in the *Chandogyia Upanishad*. It is utterly unnecessary for us to point out that the above connection of *Aum* with *Yes* is absurd, not to say nonsense. As a philologist he should have treated the word from the standpoint of philology and he would have found ample ground to display his genius without even making a sorry attempt at discovering its other and minor import. Had he attempted to enter deeper even into the philological intricacies of the question he would have surely met with certain problems of our existence which though seem to be very simple and familiar, are, in the main, the most difficult and complex, which have engaged the highest intellect of man. What would not a Carlyle, a Kant, a Berkeley, venture to attain that practical realization of the *truth*, 'Me, the only reality,' which they vainly endeavoured to demonstrate, and which still from time to time wells up into an incoherent and unsatisfied buzzing—"to be, or not to be." There is a deep gulf between the methods of the European metaphysicians and those of the Indian sages. The life and spirit of the former is *theory*, the *esse* of the latter is *realization*, hence the formulation of the Yoga philosophy. The only fault of the Indian sages and metaphysicians as also that of Jesus and St. Paul was that they did not leave for the sceptics, a royal road to reach the highest stage of existence, the state wherein the truth of 'I am Brahman' can be actually realized. Theoretically speaking, the truth of the proposition, 'I am Brahman' is incontestable, as we shall briefly show later on. But whether that state of existence, represented by Dr. Caird in his *Evolution of Religion*, as the subject shut up in itself, conscious of nothing but its own states and enjoying nothing but its own pleasures, is a scientific possibility, no reasoned argumentation can decide, for it must be supplemented by an *experimentum crucis*. Meanwhile to remain true to the impartial scientific spirit of the age, we must have a belief in the existence of that state unless actual realization proves the contrary. There is such a spirit necessary in all abstruse questions of our existence. What percentage of scientific students has really seen two material bodies to attract each other when removed far away from the influence of the earth?

How many students have really measured the volume of a molecule that we are to acknowledge its existence as universal? Great men have gone through the same problems and have *realised* them to be true; and that is the safe-guard for our firm belief in them. If there is necessarily required a kind of scientific faith in the works of great men, why should we become untrue to ourselves in disbelieving the practical methods for the attainment of that highest stage of life, expounded with the clearest logical and scientific precision by the Indian sages? And if we admit, according to the conclusion of the Vedanta Philosophy, the truth of this realized state, we are bound to admit the profound and inner significance of *Aum*, which formulates one of the methods just now alluded to. It not only contains a natural and symbolic representation of the various stages of our existence but at the same time a deep scientific and far-reaching import.

Our life consists of three states, *viz.*, the waking, the dreaming and the sleeping states. The first state is filled up with objective experiences, the second state is purely subjective, while the third is an all-unconscious and a non-dualistic state. Besides these three and in total contradistinction to the third state, the Vedanta philosophy predicates a fourth state of existence, more real than the realities of our daily life and totally distinct from hallucinations and cerebral trances. It is the state of *Turiya* or transcendental state, somewhat analogous to the ecstatic union of the Christian Mystics of the Middle Ages. In this stage, (if stage it can be called), as the Vedanta affirms, only "*pure consciousness*" remains, without the perceiver and the perceived; in other words, it is the *Unconscious* of Hartmann. We shall have much to say regarding the scientific exposition of this fourth state, the *Turiya*, after we have explained the meaning of *Aum*, for these four states are intimately connected with the proper understanding of the sacred syllable.

In order to have a full comprehension of *Aum*, we must consider it from three different standpoints. The Linguistic Aspect, apparently giving only a conventional explanation, has a deep scientific meaning. The Physical Aspect, generally ignored by the Oriental Scholars, gives a proper explanation of the *modus operandi* of many of the processes of the Indian Yoga Philosophy. The Psychological Aspect considers the attainment of mental equilibri-

um and throws light on the religious ceremonies of many of the religions of the world.

Let us now consider these three Aspects separately.

CHAPTER I.

THE LINGUISTIC ASPECT.

Every word consisting only of the combination of certain sounds has a particular signification, purely conventional. When and how such a connection had been first adopted it is beyond all limits of discovery like the formation of the alphabets of languages. The Greek letter delta when turned 45 degrees becomes the letter (৳) corresponding to *B* of the Bengali language; the gamma bears a faint resemblance to another letter of the Bengali alphabet corresponding to *N* (ন). This proves how wide are the significations and formations of the alphabets of different languages; and surely all this difference is only provisional, due only to the conventions originally attached to different letters. Similar is the case with words. "The whole body of symbols," says Prof. Sayce, "that stands for thought is purely conventional. The same combination of sounds may be used to denote very different ideas. There is no necessary connection between an idea and a word that represents it. It is as arbitrary as our making the sign (1) symbolize the idea of unity, or the sign = the idea of equivalence." (*Int. to the Science of Language*, Vol. I, p. 96). Except certain onomatopoetic words, formed out of certain natural sounds to which they bear striking resemblance there is no *natural language* among the civilized races.

Such being the case with the words of all languages, it is sheer ignorance to persist in saying that such and such words have no meaning at all. The meaning of a word must be the same as we *conventionally* attribute to it however extravagant that might seem to others. The denotations and connotations of the term *God* do not rise naturally from the three letters, G, o, and d, but the term signifies what it has been made to signify. And we cannot positively state that a word has some meaning or none at all, at present, unless we learn it from those who generally use the same. We know that the ordinary Indian people do not use the sacred syllable and are ignorant of its import in all its various

aspects. They not only do not use the same but are prohibited from pronouncing the same lest the sacred syllable shares the fate of pearls cast before the swine. Therefore, it is incomprehensible to us, why the sacred syllable *Aum* should have been regarded to be meaningless *in its present form* by eminent scholars while other words such as god, tree *etc.* are full of meaning in their present forms, notwithstanding the fact that every letter of the word *Aum* has been clearly explained in the Mandukya Upanishad. Even ignoring for the present its implied sacredness, we cannot overlook, without seriously compromising our honesty of purpose, its linguistic aspect.

Suppose we are required to discover, or rather to coin the *simplest word*, as far natural as possible, which shall designate the four states previously alluded to, and each of the four states shall be, severally and in its natural order, represented by the letters composing it. In order to reduce the artificial conventionality of a word to its minimum, we must have no letters but sounds only; for letters are artificial, whereas sounds are natural. And in order to make the word just fulfil our demand, the characteristics of those sounds must bear as much resemblance as possible to the meanings of those four states separately. Such a word is *Aum*. *A* represents our waking-consciousness, *U* the dreaming-consciousness, and *M* the sleeping-consciousness (if such a term we are allowed to apply). To prove the naturalness and consistency of the word we shall compare each individual state with each of the sounds which compose the word *Aum*.

The consciousness of our waking life, or more concisely speaking, the *waking-consciousness*, rests on the gross materials of Nature. The visual perception depends upon the existence of outer objects and the optic nerve, and all other sense-impressions are based on a certain harmony between outer objects and the inner machinery. In fine, the waking-consciousness loses its individuality if the material background is destroyed, and all the conceptions by the ego in its other states depend upon the impressions already made by the waking-consciousness; in other words, it is the fundamental state which gives colours, as it were, to all the other states of the ego. The simplest and the most natural symbol that can truly represent this waking-consciousness is *A* (as in *hot*). It is the simplest and the fundamental tone,

the first alphabet of all languages. The pronunciation of every consonant, especially those of the Sanskrit language depends upon a free pronunciation of *A*. Prof. von Helmholtz in his *Sensations of Tone*, has beautifully shown that the production of this vowel by means of the combination of simple tones together with their overtones or harmonics is of primary importance to the production, by similar methods, of other vowel-tones. It is the background of all consonant sounds like the material objects with respect to the waking-ego. Hence *A* naturally denotes the consciousness of our waking life.

The third state that of the undisturbed sleep, is a state of temporary oblivion. We cannot say that it is a conscious state in as much as all our ordinary experiences lose their existence in it. Neither can we logically affirm it to be *unconscious*, for absolute *unconsciousness* cannot be cognizant of its own nature, as in waking after such sleep we always *remember* the happiness produced while such state continued. We must therefore for certain, admit it to be a *potentiality of all the ordinary states of consciousness*. It is a state in which consciousness *exists* in an undifferentiated form; there is no idea of duality here; it is a state of absolute monism, enveloped, as it were, in darkness. The symbol that best suits our purpose is the Sanskrit letter corresponding to *M*. This letter as pronounced in the Sanskrit language bears a peculiar import. It is decidedly a consonant yet it is different peculiarly from all other consonants. For, the utterance of every consonant sound is accompanied with the opening and closing of the lips, without which not the faintest sound would be produced. If *K*, or *P* or *B* be attempted to be uttered with the lips closed all along not even a gurgling or a guttural sound will be produced. Not so with the letter *M*. In pronouncing it, the vocal chords, the thoroid, and the cartioid play the principal parts without at first taking the help of the tongue and the lips. The only tone that is produced with the lips closed bears the strangest resemblance with *M* without the indispensable *a*. Possessing this peculiar and unique characteristic, not to be found in any other consonant, *M* occupies a position in the borderland, so to say, of vowels and consonants. Again, when pronounced, *M* generally produces the sound *m* with a short *o* sound. But the tone *o* is a compound one, composed of *a* (aw) + *u* (oo). Therefore we see

that in *M* (of the Sanskrit alphabet) lie potentially the two elementary tones *a* and *u*. If *M* is taken to be the natural symbol for the sleeping-ego, as it ought to be such, and *A* for the waking-consciousness, it is natural that *U* shall be the symbol for the dreaming-consciousness.

There is another reason for identifying *U* with the dreaming-consciousness on account of the fact that, whereas the conditions of the dreaming-consciousness depend upon the conditions of the waking-ego, the production of the tone *u* depends mainly upon that of *a*. Thus we see that the syllable *AUM* represents in the simplest language, in the most natural and fundamental symbol, the ego-consciousness, or simply the ego, which can exist in three different states due to different causes and environments. But the syllable itself taken as a whole represents the transcendent state, *Turiya*; it symbolizes consciousness untainted with the characteristics of personality. This import is a natural consequence of the three individual meanings just above explained.

If *K* denotes consciousness pure and simple, *X* the sum total of the waking experiences, then $A = K + X$, $U = K + Y$, and $M = K + Z$ where *Y* and *Z* correspond to the experiences of the dreaming and sleeping-ego respectively. If $X = Y = Z = \text{zero}$, that is to say, if the causes, which condition the pure and simple consciousness and make it appear in three different states, vanish altogether, then $A \equiv U \equiv M \equiv K$. But $A + U + M$ cannot be identically equal to $3A$ or $3U$ or $3M$, for there exists only one-simple consciousness without a second, according to the Vedānta Philosophy; therefore, in such a case it is evident that, $AUM = A = U = M = K$.

The signification given in the *Māndyukya Upanishad*, of the above *metaphysical equation* is very simple and instructive. The truth of the equation is co-ordinated with the consistency of the equation, $X = Y = Z = \text{zero}$. But from the standpoint of Vedāntic monism, which establishes only one Absolute Reality, the Atman, everything else being false, temporary and delusive, (*not* from our conditioned point of view), *ultimately* and *essentially* the above metaphysical equation is logically true. Under such circumstance and in no other case, *A* or *U* or *M* or *Aum* itself may be taken to be the symbol for the *Turiya* stage—the stage of realization of the unconditioned and Absolute Reality. But as

the imports of A, U, and M have already been specified before, only *Aum* designates that Transcendent or fourth stage of Consciousness. The distinguishing characteristic of the *Turiya* stage is explained in the same Upanishad. This stage of consciousness, practically realizable, under definite conditions, is clearly distinguished from sleep, from hypochondria, from atrophy and hyper-atrophy of attention. "It is that which is not conscious of the subjective (as in dream), nor conscious of the objective, nor both: it is not simple consciousness, neither it is a mass of sentiency, nor is all darkness (like sleep). It is unseen, transcendent for it is a fourth stage, unapprehensible and uninferable, for there, is no subject and object, but the sole essence of the consciousness of self. It is the *Atman*." (Mand. Upa. 7).

In explaining the sharp and distinct line of demarcation between the *Turiya* and the other stages of consciousness, Gourapāla in his *Kurika*, with the sanction of the *Mandukya Upanishad*, throws a peculiar light, hitherto unknown to European philosophy, upon the psychology of sleep. All our experiences, whether objective or subjective, in waking or in dream are conditioned by causes and effects, or in other words, are bound by a causal nexus, the very *experience* itself denotes the above limitation. But the sleeping-ego cannot be so conditioned. The causal nexus brings along with it an ever-present sense of duality, and this sense vanishes in sleep. But, at the same time, although time and space dissolve away in sleep we cannot take it to be—*unconditioned*, for there is "awaking after sleep." In sleep there is no distinction between cause and effect, the latter being merged in the former, otherwise, it would have been a peculiar state different from our experience of this temporary oblivion. The effect being reduced to the zero-point, only the *cause* remains in a potential form, *Prajna*, the name given to the sleeping-consciousness, is conditioned by *cause alone*.

A contrast between the third and fourth states makes the latter easily comprehensible. If the one is oblivious darkness, the other is all-seeing light; if the *Prajna* is conditioned by cause alone the *Turiya* is unconditioned; if the former is ignorant of his states, the latter is all-cognizant; it is realized when the conditions of our ordinary experiences vanish.

Now it is clear to us whether the sacred syllable *Aum* is a

meaningless twaddle in its present form or exists only in borrowed feathers. In the *Maitrayana Upanishad* (VI. 23), Aum is regarded as the Word-brahman. "This sounds absurd," says Max Muller, "unless we admit that this Om was meant at first as a symbol of all speech, even as a preacher might say that all language was Amen, Amen" (*Ved Phil.* p. 116). *Aum* was never regarded as a symbol of *all* speech. The mystery which underlies the connection between *Aum* and Word-brahman is of the nature of, "In the beginning there was Word and that Word was God," the real import of which is in reality more mysterious than what the general reader of Christian theology attributes to the first sentence of the Book of Genesis. In the beginning there was Brahman, the Word-brahman or Aum, but not the three letters of the alphabet, *a*, *u*, and *m*; it was the potentiality of everything creative. We shall have to explain it more fully later on. It has its own peculiar origin in the sounds of nature, and is *not* derived from *avam* nor in any of the Sanskrit treatises it originally conveys the primitive meaning *Yes*, and the *Māndyukya Upanishad* is exclusively devoted to the elucidation of that syllable. In the *Chāndyogya Upanishad* (I. 1. 8), says Max Muller, "that syllable is a syllable of permission, for whenever we permit anything we say Aum, yes." It might have been true that whenever anything was *permitted* *Aum* was pronounced, but not *yes*. *Yes* might be taken as the secondary and derivative but not the primary meaning of *Aum*, it, signifying the highest truth, might, in the Vedic Era, have been used for whatever is true and permissible. It is a custom now-a-days, seen in several parts of the Northern and Southern India, to pronounce *aum* and *nārāyaṇa* whenever any person is blessed or greeted. Does it logically follow, that the meaning of *nārāyaṇa* is 'I bless you,'—or 'good morning?' When some thoughts or expressions are intended to be suppressed, in conversation, it is a custom prevailing all over India, to pronounce Rama, Rama, exactly like *Jesu Maria* pronounced by devout monks of the Middle Ages. The symbols of permission are oftentimes and by various races, represented by gestures without any accompanying spoken words; and the truth is that some sacred syllable should conclude the idea symbolized by gestures, of an individual who belongs to a race devoutly religious in his every deed and lives in the sacred atmosphere of religious sanctity.

This Linguistic Aspect of *Aum* though stands on itself is further supported by the fact that the pronunciation of the syllable in accordance with the established rules of *cadence* given in the *Veda* and the *Yoga philosophy* has a direct and peculiar influence upon the physical and mental systems. The importance of the Linguistic Aspect is further enhanced by the Physical Aspect we shall explain later on.

R. K. B.

*EARLY ACCOUNTS OF BENGAL, BY EUROPEANS
OTHER THAN ENGLISHMEN.*

I.

FATHER BARBIER [1715] TRANSLATED FROM THE FRENCH BY JOHN MACFARLANE, LIBRARIAN OF THE IMPERIAL LIBRARY, CALCUTTA.

This account is taken from the *Lettres d'edifiantes et curieuses* (Edifying and curious Letters), a collection of letters from Jesuit missionaries published in the eighteenth century. It will be found in vol. 13 of the edition of 1810.

Of Father Barbier nothing can be ascertained. The Bishop whose tour he describes, Francisco Laynes, was a Portuguese, born in 1656, who went in 1681, to Malabar where he is said to have baptised 13,600 persons, and afterwards became Bishop of Meliapur. He was a missionary of great energy, and the Brahmins of his time thought it worth while to put a spoke in his wheel whenever they could. For the list of his works see Hoer's *Nouvelle biographie ge'ne'rale*; whence the preceding particulars are taken.

*Letter from Father Barbier, Missionary of the Company of Jesus,
to Father * * * of the same Company.*

Pinnepondi, in the Carnatic Mission,

15th January, 1723.

Reverend Father, the peace of Our Lord be with you.

When God called to Himself our Lord Bishop, the Rev. Father Francois Laynez, I had the honour of forwarding to you some circumstances of his holy death. You took the trouble to publish them in the collection of the *Edifying and Curious Letters*, and thereupon informed me, that you would be obliged if I would impart to you some details of the journey I made with this worthy prelate, when I accompanied him on his visitation of his diocese, which comprises all the provinces between Cape Comorin and the confines of China. I do so the more willingly, Reverend Father, as I have a lively recollection of the zeal of this holy Bishop, who regarded his high office as a new undertaking to perform with greater distinction the part of a missionary, which he had fulfilled for nearly 25 years.....

The land of Bengal, lying at the end of the Gulf which bears its name, is the cradle, so to speak, of all the Indian supersti-

tions. There is continual talk there of a celebrated Academy at *Nudia*, where a large number of Brahmins busy themselves with the best means of bringing the ridiculous system of their religion into credit.

You will easily suppose that the Demon did not view with equanimity the results that were bound to follow from the arrival of the Prelate among the Christians, who up till then had never seen their Bishop. So the latter had to endure much thwarting in all that he undertook for the good of men's souls.

During our eight days' voyage after leaving Madraspatan, we coasted along *Coromandel* and *Orissa*, about 250 leagues, and found ourselves on the 9th June 1712 in the roadstead of *Balassor*, at the mouth of the Ganges. We were met there by a violent storm; the lightning struck our vessel, the foremast was shivered and broken into a thousand pieces; two men were struck dead, ten or twelve others lay for a time stretched out on the lower deck, two or three lost their sight for several days, and fright and consternation were widespread.....;

It is usual to send ashore for a coasting pilot in this roadstead, so as to pass with the tide over the sandbanks that close the mouth of the Ganges.....

The first twenty (leagues) of our journey lay through immense forests, but after that a fairly populous country appeared. The Europeans, of various nationalities, have established there a number of places to admit ships. The meeting of the rivers brings together in places a considerable number of trading ships. *Coulpy* has fairly good anchorage—the French and English vessels generally anchor there. The Dutch go up to *Folta*, 15 leagues further, and all these, as well as the Danes and Portuguese, take their vessels right up to their factories, when weather and currents permit.....

After this we left our vessel and got into a *Bazeras* (a country boat taking from 6 to 40 rowers, according to size, and having one or two roofs on the stern.) This mode of navigation is absolutely necessary on the Ganges, on account of the floods that occur regularly in certain months of the year and subsequently form a prodigious number of channels intersecting the country. The *bazeras* was sent by M. Rouxel,* a relation of the Admiral of that name, and Governor of *Collicuta*, which is one of the most cele-

* Russell.

brated settlements that the English Company has in the Indies. There is there a church for Catholics, built before the English gave this spot the appearance of a town. It is served by a Reverend Augustine Father, like all those in Bengal, the King of Portugal having put all the Christian communities under the care of those Fathers. The Popes have given this monarch, as being Grand-Master of the Order of Christ, power to nominate to all the benefices in the Indies.

We set foot on shore, and M. Rouxel, though a Protestant, shewed by a salvo of artillery and other marks of honour, the esteem and respect that he felt for the Bishop. Next day we embarked on the French Company's *bazeras*. Father Tachard and an officer sent by M. d'Hardoncourt had already come to meet the Bishop. We ascended eight leagues higher up, to *Chandernagor*, the Company's factory.

The Prelate after having called on Government and having received the honours due to his position, came to lodge in our house, but only stayed three days, going on to the Monastery of the Augustine fathers, which is two leagues further up, at the *Bandel* or settlement of the Portuguese. There is a College of our Company there, attached to the province of Malabar.

As this Church is the mother of all the other churches in Bengal,* the intention of the Bishop was to obtain there the necessary information for the rest of his tour. He stayed there three months, but his functions were greatly disturbed by the war that followed between a Moorish lord and the Governor of the fortress of *Ougli*, which belongs to the Mogol and is only a quarter of a league distant. This close neighbourhood obliged the Christians to be incessantly on the watch, and to make their settlement a sort of fortified port, which did not leave them free to go to church to hear the instructions of their Bishop.

He returned to Chandernagor. There we had to pay the tribute that all new-comers pay to Bengal, that is to say, during four months, out of the twenty people in the house there were always four or five dangerously ill.

* It was built in 1599, but see Du Jarric, *Histoire des Indes Orientales*, who gives (1) Ciandeca (2) Chittagong (3) Bandel.

He (the Bishop) started for *Chatigan** about the middle of January 1713.

Before giving you a description of this country, it is as well to say, Rev. Father, that there are three sorts of Christian communities to be distinguished in Bengal.

The first is composed of Europeans of the different nations, which have established factories where their agents and the latter's servants are, and other people who place themselves beneath their flag. These communities are established along the main stream of the Ganges, which bathes the foot of *Ougli* fort.

The second kind is formed by the Mogul himself. This Prince, in order to defend his frontiers against the inroads of his neighbours, and to hold new-conquered peoples in awe, has desired to have, in addition to the Moorish garrison that he had put into each of his fortresses, another garrison in the neighbourhood formed of hatted folk, as they call the Portuguese, originally of Goanese origin, whom he has hired and kept in his service. As they have multiplied to any extent, this community has become very numerous at *Ougli*, *Pipli*, *Chatigan*, *Dacca*, *Ossumpur*, *Rangamaty*, and elsewhere, and this great number of Christians is comprised in the term "hatted folk." That does not mean that they all wear hats, for it is only the head of the family that makes use of them and even then only on great occasions, but that is the name they go by.

Lastly, a number of heathen converted by the zeal of the missionaries and their catechists, dwelling in different places, form the third class of Christian community.

Chatigan is one of the most populous of these communities, partly on account of the excellence of its climate—one is hardly ill there—partly because the Mogul finds himself obliged to guard on that side against the incursions of the peoples of *Aracan*, and *Pegu*, on whom his territories border. This was what inclined the Bishop to begin his visitation from there.

To get there we had a fearful journey. Eight whole days hardly sufficed to bring us to a human dwelling, though the men rowed eighteen hours a day, and the current was favourable, and

* Chittagong.

the tide too very often. Up till then we saw nothing but thick woods, and river channels through which the Ganges pours its way, sometimes of prodigious extent, sometimes so narrow that we could only use our oars on one side of the boat. The banks are set with great trees with their boughs projecting far over the water, and one is in perpetual alarm about tigers, traces of which occur from time to time in the shape of stakes driven into the ground in places where people have been devoured on the bank, or even snatched out of their boats. In the water are crocodiles twenty or thirty feet long, which swallow men whole. Lastly, one is often at the mercy of the robbers who prowl incessantly about these parts in *Panceaux*,* that is to say, little boats that shoot along like an arrow. Through these dangers, then, we made our way to the Chatigan coast. A final arm of the Ganges runs along this coast and forms the Gulf of Bengal on the east, just as the Coromandel coast forms it on the Indian side.

The first inhabitants that we came across surprised us by the extraordinary way in which they were dressed. They had drawers of striped cloth, very baggy, slippers, a cloth shirt or doublet on their heads, a sort of cap with flaps, with its ends turned up, and over all a dressing gown, which serves as a coverlet at night and a robe of ceremony by day.....

When the mission was nearing its end, he [the Bishop,] notified a general commission one feast-day..... During his visit to *Chatigan*, he administered the sacrament to more than two thousand Christians.....

The Christians of *Chatigan* are divided into three tribes, living within half a league of one another, each with its captain, its Church, and its one missionary, though there would be work enough for several. Portuguese is generally spoken, but the natives, who are for the most part slaves, and who are nearly always addressed in their own languages, have great difficulty in learning in a foreign tongue the things necessary to salvation. With a view to their instruction as well as of the Christians from up-country, called the *Boctos*, who came from the interior to receive the sacrament, I began to study their language, and in a few months I became skilled enough to hear confession, and to draw up a little catechism..... The respect inspired in this country by the

* Pansi (পান্সি).

Christians, and a little also by the arms they bear, for they are all professional soldiers, leaves them entirely free to celebrate feast-days in the same order and solemnity as in Europe.....

I more than once regretted that the Europeans who wanted to settle in Bengal did not choose *Chatigan* in preference to *Ougli*, considering the safeness of the anchorage, the facilities for landing, the excellence of provisions, and a thousand other conveniences which might have been expected to attract them thither. It is true that the Moors, whose interest it is to keep them shut up as it were in the interior, do all they can to oppose this, and if by ill-luck any one is obliged to put in there by the violence of a storm (as happened in my time to an English and to an Armenian ship, which, not being able to reach Balasor, were obliged to run themselves on shore at Chatigan) they inflict on them so many annoyances that after eating a part of their cargo they are obliged to let go the rest, and the vessel itself, to save their lives.

Chatigan, it may be mentioned, is 15 degrees further East than *Pondichery*. I had occasion to note this when there was an eclipse of the moon, which I observed with some exactness. The latitude I have several times observed : it has always appeared to be 21 degrees 20 seconds.

We left *Chatigan* to go up the Ganges again on our way to *Dacca*, the capital of Bengal. Five days journey from *Chatigan*, we turned aside for a day to visit a Christian community existing in a place called Boulona. God himself supports it and directly governs it, for it rarely happens that a missionary pays it a visit. It was five years since one had appeared there, but I can assure you there was no place where I found so much matter for edification....

Dacca, which as I have said, is the capital of Bengal, lies within 20° North latitude. The facility of communication afforded by the rivers makes this town a great centre of trade. The muslins there embroidered with cotton and silk are highly esteemed in Europe. As for the town it is as filthily dirty as can be. Imagine a prodigious number of huts, occupying a plain half a league across, forming very narrow streets full of mud and filth after the smallest shower. Amid it all a few brick houses built with poor taste in the Moorish style rise at intervals, like the trees

left standing when our thickets are cleared. There you have a living picture of *Daca*.

The Christians have their church in a somewhat more decent part of the town, to the east. It is of brick and fairly large.....

We stayed at *Daca* all the month of December, which gave us time to keep Christmas there.... After the feast we prepared for our journey to *Rangamati*, which is on the confines of the territory of the Grand Mogol, and lies about 27° N. People say you can get from there in fifteen days to the province of Yunnan in China. It is not however a beaten track, and the interior is occupied, it is asserted, by princes who refuse to let strangers pass through.

We were put in terror of this journey, for it is a common saying in Bengal that if two people go to *Rangamati* one of them always stays there....

We left immediately after twelfth night for *Rangamati*, and took three weeks to get there, on account of the strength of the stream, which obliged us to be towed continually. The water was extremely clear, for we were no longer sailing on the Ganges, which is everywhere muddy, but on a different river coming from the East and falling into the Ganges above *Daca*. No one could tell me where it rose.

On the fifth or sixth day we arrived at a small town entirely Christian, named *Ossumpur*, where we only stayed one day, as we were to pass through it again on our way back. The road after this was very difficult travelling. We found a desert country, with a very cold climate, the river, as happens at this season, covered with continual fogs, which prevented our seeing ten paces in front of us, the current rapid, rocks with their tops level with the water and in other places sand banks. In the end however God, who was our guide, preserved us from all these dangers, and we arrived safely at *Rangamati*.

The inhabitants received us with signs of great joy, but when we saw how pale and haggard they were, and how their faces showed the fever that inwardly consumed them, we understood that the accounts given us of the malignity of the climate were accurate. Nevertheless I was all right, except for an attack of

fever. In the twenty-five days that we stayed here, the Bishop confirmed more than a thousand persons.

In my conversation with the people of the country, I learnt of an occurrence which I must not omit. They told me that this part of the country had been infested with a terrible monster, a serpent of such prodigious size, that when he crawled along he made a track eight or ten feet wide. He generally had his lair in a mountain not far from *Rangamati*, up the river, whence he had an easy view of the stream, and as soon as he perceived a boat, would come down in the nick of time, plunge into the water, upset the boat and devour its occupants at his ease. This plague went on until a condemned criminal offered to rid the country of the monster, provided his life were granted him. His offer was accepted. He managed to get up the river above where the terrible dragon resided. He constructed several human effigies of straw, covered them with clothes, and filled their insides with hooks and harpoons connected with a number of ropes, the latter being attached to a single cable, which was strongly fastened to the foot of a tree. He set these straw men floating on the stream on banyan trees, which carried them away down stream. The ruse succeeded; the dragon saw them, and came down to devour them, but met his end there, torn asunder by the quantity of hooks and harpoons that he had swallowed. I have myself counted as many as eleven crocodiles lying on the sand, three or four of them, it seemed to me, twenty-five or thirty feet long..... [Return by *Ossumpur* and *Daca*] After the Easter feast we were minded to return to *Ougli*. This last portion of our travels took about twenty days and tired us more than all the remaining part. The moons of April and October are always stormy in these parts, and we started on the first of them, so that from the day we left *Daca* till we got to *Ougli*, it might have been said that we had a storm hanging on to the rudder of our boat. At about three or four o'clock we had to look for a sheltered creek or a deep arm of the river, in order to guarantee ourselves against the storm, which was liable to come upon us at nightfall. We thought we were caught when rounding a point called *Narsinga* not far from *Cassimbazar*, where a storm of such violence came on, that next day nothing was to be seen around but remains of boats which this tempest had broken in pieces.... A few days after we landed at the church of St. Au-

gustine of the *Ougli* convent, where we returned thanks to our Lord for having brought us back to that place, in even better health than we had started.

The Bishop, after having received congratulation on his safe return, wished to honour again with his presence our house at *Chandernagar*. He then returned to the College which the Portuguese Jesuit fathers have at the *Bandel of Ougli*. He had hardly lived there nine or ten months when, worn out with his labours, he terminated his life of hardship on the 4th of June, 1715, in the midst of his brethren, and went to receive the reward for a life of which every moment had been spent in the conversion of idolaters.

ADMINISTRATION OF THE AFFAIRS OF CEYLON,
1896-1904

[EXTRACT FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW.]

VIII.

BUDDHIST TEMPORALITIES ORDINANCE.

The report of the Commissioner led to the drafting of a Bill to amend the law on the subjects. No new principle was imported into this Bill, which had for its object the improvement of the existing machinery, the defects of which were disclosed by the investigations of the Commissioner.

The draft Ordinance was duly introduced into the Legislative Council, but it was ultimately decided not to proceed with it in view of the weighty opinions which were expressed by the Buddhist leading men (including the Kandyan representative) that it would be of no use unless it provided *inter alia* that a Commissioner or Commissioners appointed by the Government should supervise or actively participate in the work of the committees appointed under the Ordinance to regulate Buddhist affairs,— a provision which is opposed to the policy laid down by His Majesty's Government.

That policy, I may remind you, has been laid down by former Secretaries of State in unmistakable terms. So far back as 1846 an Ordinance "to provide for the management of Buddhist vihares and dewales in the Kandyan provinces" was disallowed by Lord Grey principally on the ground that as regards removal of a Buddhist priest from office it was proposed that an appeal should be to the district Court. Two years later, objection was again taken to a similar Ordinance on the ground that "the connection of the executive with Buddhism, instead of being dissolved, as is professed dissolved, as is professed to be done by the Ordinance, is thereby only re-established and strengthened in another form," because it was proposed that *ratemahatmayas*, who were appointed by the

Governor or by some Government Agent, should be *ex officio* members of the Board of Directors created by the proposed Ordinance. Once again in 1877, Sir Michael Hicks-Beach, in reply to a new scheme for dealing with Buddhist Temporalities which had been prepared by Sir William Gregory, objected to the transfer of the Buddhist ecclesiastical property to Commissioners named by the Crown, and stated that he was "not prepared to sanction" a proposal involving such an amount of direct interference on the part of the Colonial Government with the affairs of Buddhists.

In the face of these repeated positive instructions, it is difficult to see how the provision I have referred to could possibly meet with the approval of His Majesty's Government, even if its enactment were expedient on other grounds. I regret that the amendment of the law proposed by the Government has not been accepted by the Buddhist leaders, for I did not feel justified in persisting with it without the co-operation of those who are the interested parties."

THE CEYLON MANUAL.

During my administration of the Government of this important and ever-growing Colony, I have constantly felt the need of a compact book of reference containing what I may term "administrative information" with regard to such subjects as the various establishments connected directly or indirectly with Government, the salt monopoly, the arrack question, the financial history and present position of the Colony, &c, and also the multifarious rules, regulations, minutes, and circulars which are at present in force. There are several works partaking of the nature of handbooks on Ceylon, such as Mr. Ferguson's excellent "Handbook and Directory," the annual Administration Reports and Blue Books, the Civil List, and so on, but what is required is a compilation partaking of the nature of each of these, but more strictly official in character. In a word, it should be a work in which a new Governor or Colonial Secretary, and indeed officials generally, can find complete and reliable information in a readily accessible form regarding every branch of the administration and every department of Government.

I accordingly directed such a work to be prepared under the editorship of Mr. Herbert White, C.C.S., and its publication took place a few days ago under the title of "The Ceylon Manual, for the use of officials." I believe that this work will prove of

great utility and interests to all those whose duty or desire it is to acquire an accurate knowledge of Ceylon affairs.

THE GOVERNMENT PRINTING OFFICE.

The Manual has been printed at the Government Press, and I wish to take this opportunity of expressing my warm appreciation of the uniformly excellent work which proceeds from the Government Printing Office. It is no exaggeration to say that no branch of the administration is in a more efficient condition than that presided over by Mr Skeen. The welcome activity in every Department of Government during the last eight years has involved an extraordinary increase of work in the Printing Office, in proof of which I may inform you that the number of pages of bookwork printed has increased from 13,007 in 1896 to 38,626 in 1902, the *Gazette* alone having grown from 4,804 pages to 17,290, and printed forms from 20 to 32 millions. Yet, in spite of the heavy demands on their energies, the Government Printer and his assistants have worthily maintained the high reputation of the department for first class printing and for the care and promptitude with which its work is executed.

Two of its achievements are deserving of special mention, namely, the voluminous Report on the Census of 1901—a work which Mr. Cottle, Acting Government Printer, justly characterized as the largest and most intricate typographical undertaking ever accomplished in Ceylon—and Souvenir of the Visit of Their Royal Highnesses the Duke and Duchess of Cornwall and York in April, 1901. This latter work—which, I may remark, was bound by one of the prisoners of war then interned in the Colony—won a high tribute of praise from His Majesty the King, who graciously expressed “the great interest with which he had seen such an admirable specimen of the work of the Government Printing Press in Ceylon.”

THE CIVIL SERVICE.

The principal features of the re-classification and re-organization of the Civil Service which I carried out in 1897 were as follows:—In the first place, salary ceased to be attached to a particular post, save in the case of the appointments of Auditor-General and Treasurer. Appointments were made interchange-

able between the second and third and fourth and fifth grades, so that an officer of the third grade may remain at the post he is holding when promoted to the higher grade. Again, an officer returning from leave has no longer a claim on what was known as his "fixed appointment," with the resultant moves all down the service. Secondly, the incremental system was introduced, thus preventing the possibility of an officer stagnating for ten or more years on the same pay, with the almost inevitable result of decreased interest in his work. Thirdly, the pay of the second class was substantially raised from Rs. 9,600 to an initial pay of Rs. 10,000, rising by increments to Rs. 12,000. That of the third class was improved by being altered from a uniform Rs. 7,200 throughout the class to Rs. 7,000 increasing by increments of Rs. 9,000. The pay of the fourth class was raised from Rs. 4,500 to Rs. 5,000, thus reducing the gap between it and the third class.

The re-organization has proved entirely successful in remedying the chief defects which were noticeable when I arrived at the Colony. Stagnation for many years on the same pay is now impossible; the number of changes and transfers—than which nothing is more prejudicial to effective administration—has been reduced by 25 per cent; and—perhaps the most important point of all—the Governor has now a wider field of selection, and can without difficulty appoint to a particular post the officer best suited to fill it.

Recently, however, another defect, and one of a somewhat serious character, has been forcing its way into notice. Briefly, it lies in the fact that the staff of the service is too nearly equal to the total number of posts to be filled; in other words, practically no provision is made for supernumerary officers to take the place of those whose turn it is to go on leave. It is unnecessary to remind you how essential it is both in the interests of the service and of the Colony that a fair amount of leave should be allowed to all officers, to enable them to recruit their health and to neutralize by a renewal of home ties and associations the narrowing influence of life in remote stations. But I may point out that the grant of a liberal term of leave has become the more advisable in consequence of the policy of advancement and development which has in recent years imposed on the Civil and Judicial staff of the Ceylon Civil Service a heavy additional burden. I have been

specially anxious, therefore, to grant all reasonable applications for leave, but I have not unfrequently been obliged to give a reluctant refusal, and in many more cases I have only been able to accede to them either by utilizing the services of an unpassed Cadet, or by employing a gentleman not in Government Service, or by entrusting the duties of two district and separate posts to one officer. To each of these expedients for filling temporary vacancies there are obvious objections, and the only really satisfactory way of putting the question of leave reliefs on a proper basis is to increase the existing staff. I have therefore proposed to the Secretary of State that seven additional men should be added to the Civil Service, this being the number which, it is estimated, is required to enable Government to fill vacancies in a regular and satisfactory manner. I believe that such a strengthening of the service would result in an increase of efficiency which would far more than compensate for the slight additional cost, and I earnestly hope that the Secretary of State will sanction my proposal.

During the consideration of this matter my attention has been directed to a much larger question,—the question of improving the remuneration of the Civil Service by placing it on a gold basis as has lately been done in the case of the services of the Straits Settlements, the Federated Malay States, and Hongkong. As soon as the recent improvement in the position of the members of those services becomes generally known, it cannot fail to induce the successful candidates at the competitive examination for Eastern Cadetships to avoid the Ceylon Service, the pay of which is now so much less favourable. Such a result is very greatly to be deprecated. Ceylon furnishes an ideal training ground for young civilians: nearly all the units of the administrative machinery of India have their miniature counterparts in this Colony, which is thus an excellent training ground for administrative posts in other, and especially, ~~new, colonies~~. It is therefore a matter of Imperial moment that the Ceylon Service should draw its raw material from the very best source available, but this will not be possible if the other Eastern colonies can outbid Ceylon for the best Cadets.

There is another reason why I consider the time has come when the pay of the service should be raised. Owing to the increased cost of living it is becoming every year more apparent that the salaries

now paid in Ceylon are not sufficient to enable even prudent officers certainly in the lower grades, to live in necessary comfort or to avoid debt. The cost of the Civil Service, I may remind you, is only $2\frac{1}{2}$ per cent. of your total expenditure. I regret that this important question has only taken definite shape at a time when it is too late for me to do more than place my views before the Secretary of State.

NUPTIAL BLISS.

1.

• Upon an eve of summer-day,
I pluck'd the buds of chaimelly
And sprinkling water on the tray
Awhile I left them merrily.

2.

Again I saw them in an hour
And they are full-blown ; one and all,
I found them each a lovely flower
Shedding perfume o'er the hall.

3.

A cry of joy burst on my ear
'Twas from my little wife, who sped
To take the flowers she held so dear
And weave a garland in her braid.

I kissed her face belov'd and slender
And cried, "Thou little 'bud of love !
Wilt bloom too soon a splendid flower
To me a wreath of joy will prove."

• KRISHNA LALL BONNERJEE, B.L.

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MUCH ADO ABOUT NOTHING.

PART I.

Phakir Chand rose with the lark. It was a dreadful experience for the son of his father, yet he could not help it. But instead of the picture of indolence that he was, Oh wonder! he looked full of life and flustered a good bit. Now in, now out, now to and fro, was there ever a greater activity? Nay, the household was astir. There was the housewife busy cooking, there the matron pattering about, the housemaid scouring, the youngsters buzzing and the baby mingling her cries with the general hubbub. Even dead matter joined in the commotion, for while the utensils jingled through the process of cleansing, the store-room was resounding with the croak of pottery and to the music of the broomstick the kitchen lent an agreeable hiss. Ha! what could the matter be? what meant the splutter, the stir and bustle? Oh, you don't know after years of dallying and fooling ~~our~~ ^{our} hero was going to have a job at last in a mercantile firm at Calcutta. The old cashier, his uncle, had begged his Burra Sahib to throw a crumb for his nephew. Who doesn't yield to lickspittling? The result was that a Bazar Sircarship was offered to our hero. 'Come sharp and join,' the uncle wired to the nephew. The message came the day before. The night passed in expectations and with the approaching dawn our hero was preparing for a journey to the metropolis. Hence the fuss.

Jove! he was tearing about. Now with the hookha, next half-buried in water, soon before the glass, how unlike himself! how

changed. In the fever of excitement he kicked the poor Puss for *mewing* and *mewing* as he sat packing his clothes and wiser than his feline friend, the house-dog turned tail to avoid a like fare.

The culinary preparations were complete. He ate a fairly good breakfast and after another parley with his hubble-bubble rose to depart.

Then ensued a scene of sighing, sobbing and shedding of tears and the moment recalled sweet memories. The reminiscences of the good old days now came back with painful impressiveness and with them the thoughts of his pursuits and associations came dream-like in scattered fragments. How torturous to make a breach with the past, to be divorced from the relish of home-life! Woe to the day he had asked his uncle for a job, who knew the old drivelling fool would be bothering his head about it? Would that the Burra Sahib had cancelled the arrangement. He cursed himself, cursed his uncle and even the housewife he spared not for letting him go.

The dawn was breaking. The East blushed. The birds chirpped out. It was time to start. Oh! the pang of separation, the agony of the parting look. Who knew when he might return. Are not holidays in a mercantile firm few and far between? However the scene ended with our hero trudging out of the house, bag in one hand and an umbrella in the other.

Now past by-paths, past neighbours' yards, past patches of green and the village road was gained. A deep hush was still brooding over its lonely length, broken only by the sound of his heavy foot fall as he plodded cheerlessly on, now fetching a sigh or drying up a tear as though it was an evil day for him, a day of misery.

The dawn soon gathered into day and the first arrows of the rising sun quivered through the air. One by one men turned up. As he passed, ~~one~~ one began to wonder where could he be going to. Was anything the matter with him? It was impossible to believe that he was going off for work, a hopeless sot that he was. Thus while guesses and surmises were spending themselves harmlessly, he threaded his way out of the village on to the high road to the Kanchraparah railway station.

The sun now bathed the landscape with his brilliant lustre and faster than his golden car the news travelled through the village that our hero was gone away no one knew where. People met here and there enquiring what was up. The Moodie's shop

was filled to over-flowing and the Barwaritollah had never witnessed a larger congregation. At the tanks women stood dripping wet, listening to fussees in mute amazement. A sensation prevailed. The old folks swore that he had no business capacity. The boys wagered their hidden treasure against anything that he must have been turned out. In fine, before the sun was high it was rumoured all over the village that our hero had a roaring brawl with his wife and was off for good and all. .

To return to our hero. He was treading the long road, sad and gloomy, regardless of the glories of the landscape, its varied charms and its finishing grace, regardless of nature's coloured beauty, her serenity and her attire of vernal loveliness. On, on, still onward, when far away above hazy tree-tops the railway distant signal peered out in bold relief. The station was almost reached, thought he, but his limbs were exhausted and his spirit needed cheering up and what could be more exhilarating than a *chellum* of tobacco carefully prepared. Wistfully he turned towards a hut on the roadside. It was rather an apology for a shop, but never mind it, he gave a look in.

Whiff! whiff! puffs of grey smoke rolled out of his lips and nostrils. It was a perfection of relief. Much soothed, he now gave himself up to the pleasing contemplation of a magnificent prospect opening before him. The transition was sweet from the cold truth to the warm atmosphere of fancy, whose rich imagery soon entranced him into a complete forgetfulness of his situation. What was now the world to the dream personality enshrined in the aerial castle of his brain-coinage. Whiff! whiff one, two, three, nearly twenty minutes flew noiselessly away.

But hark? Tin-in, Tin-in, Tin-in.

'The bell? the bell?' vociferated the shopman in a tone of warning.

"Never mind it" he muttered carelessly, with eyes half-closed "there is time yet. The train has only left Muddunpur."

He plunged back into his reverie and in the dream of delight forgot what he was about, his business and all. Even the outward sights were obliterated, the past blotted out and the present vanished into space. What cared he for the world without? "Ever let the fancy roam, pleasure never is at home." He was now promenading in the fairy-land of fancy, and from his vision the horizon of reality was

fast receding. Whiff, whiff? flew wreaths of smoke, producing a soft accompaniment to the gurgling melody of the hubble-bubble.

The bell tin-ined a second time.

"The bell again" repeated the shopkeeper, wondering what a moony, day-dreamer the morning had brought him into contact with.

"Hum" interjected, he, still chewing the cud of sweet fancy, with no great concern for external things save only what his Hookah exacted, of whose presence he was only conscions. Whiff? whiff? the smoke curled up, its action deepened, and time crept noiselessly by.

Presently a low rumble of iron wheels broke in upon the silent air.

"The train at last" ejaculated the shop-keeper, much amused at the development of the scene. "Eh?" he started up? Down dropped the hookah, the chillum crackled and amid the snarl of his host he burst impetuously out.

He ran, ran, ran. But what sound was it? Help. Help. Merciful God? his feet tumbling on a clod of earth he was down, over head and heels, wallowing in the dust. It was an awkward fall.

"The devil take the train," he imprecated in downright rage, as he rose up and was flicking the dust off his clothes. "Perdition seize it, and the old goose too, dog of an uncle, slavering dolt."

Thus between rage and disappointment, he poured down a torrent of execration first on the train and lastly on his poor uncle whom he took to be the author of his trouble.

The morning train was missed.

Nevertheless he helped himself over to the station and was noting down 10—12—3—6—9 from the time-table board in the wall.

"The next down passes at 10," confirmed a burly Jemadar.

"Why," that's three hours to wait. "Tedious," growled he.

Not to be balked again, he resolved to stick to the platform, which he was soon pacing in a state of perfect security as to his travelling prospects. Up, down, up, down, up again, down next, his feet beat incessantly upon its gravelled surface. The walk was tedious and the heat oppressive. Their combined action on him was an acute sense of emptiness of the stomach. Why, thought he,

a good place of refreshment was near at hand, what harm if he snatched a hasty lunch rather than travel with an empty stomach.

A sharp appetite and the exigencies of the time-table giving promptness to his movements, he was seen next instant comfortably lodged in a sweetmeat shop before a *tonga* (টোঙ্গা) of choice edibles, opening his campaign first of all with Loochee. How delightful was the sensation produced? It eased his mind of half its poignancy. Surely, who can contain himself when the flavour of hot Loochee excites his olfactory nerves and to nibble with it a slice of half-spiced potato-dum is to be forgetting one self. It was to him a moment of supreme bliss. Potato finished he looked wistfully at *Begoonbhaja* (বেগুনভাজা). Next went. *Pawpur* (পাঁপুর) cracking in, followed by one or two *Khasta Kochoorees* (খাস্তা কচুড়ি). A couple of *Neemkees* (নিমকি) brought up the rear of the noisy procession. Sip, sip sip? rose the soft music of *Uhatnee* (চাটনি). Delicious! What next? his eyes gleamed as the red glow of *Pan-tooa* (পান্তুরা) now flashed from the depth of his half-emptied *tonga*. The next instant the crimson dainty in a mutilated condition was fairly under way for his stomach. 'Exquisite' he chuckled, licking its sweet memory out of his fingers. His eyes next fell covetously on the nice little pile of it sparkling upon the stall amidst a motley variety. The sweetmeat vendor grasped the situation and was soon busy handing him one after another.

"Surely my friend you are the master of your craft" he complimented good-humouredly, in appreciation of their grateful effect on the palate.

The first bell had rung out unheeded, now the second bell announced that a train was in sight.

"Good gracious?" He sprang up, but his eyes refused to withdraw from a white globular form now peering from beneath the few *Bondceas* (বন্দিয়া) that half-hid it. It was the much-reputed *Kanchagolla* (কাঁচাগোলা) the place was noted for. What, leave it untouched? Impossible. The next moment the milk-white globe was undergoing the process of mastication. Ravishing! ravishing! The heart yearned for another, especially as the view of the neat little pyramid of it upon the stall swept all other considerations. The *tonga* chuckled, he now turned to the pile. The topmost came first, another next, then a third, a fourth, he sat again the better to enjoy the situation, a fifth followed, a sixth and so on. He had

just commenced his eleventh when the train came screeching. "Merciful Heavens?" he started to his feet and cramming the remnant into his mouth, more, than half-choked, emptied a glass of water.

This done he turned to shift.

"The fare" demanded the Moira fretfully.

"Confound me!" he, muttered vexedly and pulling out a Rupee tossed it down.

The Moira tendered him the change.

A four-anna bit! By Jove? can his gluttony have cost him three-fourths of a rupee. This was more than he could believe.

"Horribly unfair" he roared out "Come, no fooling me. I can't stand it."

"It is monstrous that I should be trifled with" sharply retorted the confectioner. "Why, have n't you more than half-emptied my baskets to stuff your belly with? Then what the dickens do you worry for? Take this and retire. I will have no more of your prating here." So saying, he flung the little silver bit on the ground.

"Hang it," he pealed out, scarlet with rage, the light of fury blazing in his eyes "Snuffing dog, you shallow-faced lick-boot! What, dare humbug me. Have a care or I will lay my umbrella about your shoulders."

"Look to your tongue, sir" replied the former in hoarse accents of ill-suppressed wrath "Soon I will make you keep a more civil tongue in your mouth, you blustering bully-rook"

A quarrel arose, each charging the other with fraud and their loud voices snarling in violent vituperation drew the attention of the neighbour-hood.

Ha? what noise is there? Interposed some passers by. The little shop was turned for a few minutes into a Court of Common Pleas and on the Dandel's, committing themselves to a verdict adverse to our hero, he was obliged to clear out with the four-anna bit, with a round curse on the shopkeeper.

He hurried to the station but only to behold the train roll majestically out of it.

"Dear me, it is getting serious, a sort of fatality I should think!" he groaned as he flung himself on a waiter's seat after the time-table had shown 12 A. M. the next train hour. A short reflection longer. Well, thought he, to wait about was to be reaching his goal

too late, yet a return home meant subjection to what not. What to do. No, no, the latter course was anything but acceptable. Prudence decided in favor of the former. But the time must be got over till 12 o'clock. To make the interval tolerable he bethought himself of the vivifying power of music.

Ha! what was it, the dull droning, flat and expressionless, which, when it rose to a higher key, resembled a bray and descending died on the lips? Hush? he was humming an air. Jove? could sounds so mellifluous escape from human lips? Such long-sustained tones, such nightingale shakes, such limpid notes, could they be caught up by the voice of any other mortal? Could breath vibrate so powerfully as to stun the air and sink to a whistle all at once? Ah! the sighs of the Æolian harp, the modulations of the Cuckoo, the sweet shrill of the Robin, what more do you want, were all present in the melody he was jerking out. Thrilling, thrilling. It was a master-piece of song and he the master singer.

But jesting apart, the music did beguile the tedium of the long waiting, for when the time drew he could scarce believe that he had droned away 'two devilish hours.' It was nearly twelve. The bell, had chimed out its measured note. The lonely platform was full again and lo! where the iron track kissed the horizon's rim there curled up a cloud of smoke.

PART II.

Presently there loomed through the smoke a dark spot—a dot—as small as pinhead—next as big as pea—growing still, shapeless at first—discernible next, but assuming outlines, which soon gathered themselves into the dark form of an engine with a train behind.

"The train, the train" cried out an impatient passenger. All eyes were turned in the direction of the object espied.

He felt his heart beat. There was the train coming. Here was he ready as ever. What could now stand between him and his Sircarship? But the happy state of security was not fully realized until the train steaming in he found a place in a snug, cosy corner of an inter-class compartment.

Oh Joy? He had secured a train at last and was now fairly under way for the metropolis. In the ecstasy his imagination broke loose. He fancied his uncle was presenting him to his Burra Sahib and the latter receiving him with open arms. The flapping wings of phantasy bore him to yet brighter visions than had ravished Alnaschor on the hot-bed of indolence. From a Bazar Sircar he rose to a Burra Babu and what if the Sahib retired who knew but the vacant post might be his. He would then puff out the louts of his village and make short work of its cronies. Thus visions imbued in the prismatic colors of fancy flitted like a panorama before his mind's eye enchanting him by their witchery of gorgeousness. His profound meditations were suddenly cut short by a hatted whiteman protruding an arm in.

The checker, the checker.

"Ticket please" he demanded of each passenger in his usual gruff tone.

One by one the others produced their tickets.

"Come on" said he turning to our hero.

Oh God! he had forgotten to book himself. The colour fled from his cheeks. He assayed to speak but words stuck in his throat. It was confusion worse confounded.

"Be quick, man" repeated the checker, his voice rising to a hoarser pitch.

The situation was awkward. He felt stricken dumb and his lips parted only to pass some inarticulate sounds. "Out" thundered the stubborn son of Eurasia, giving him to understand by his looks that unless he could produce the little bit of paste board he must either clear off or have a tug straight to the railway police office. No, no, the latter alternative was by no means pleasing.

Between dread and disappointment he issued forth and scudded towards the booking office. Oh, mercy, it was closed. They don't issue ticket when a train is in. He rapped at the door, bang, bang, joining his voice to the manual activity, but the unyielding board of mahogany answered in rattling notes that the railway arrangements were not to be disturbed for his convenience.

The fiend seize the dog of a booking clerk "he cursed out dropping his voice to a lower key and finding importunities of no avail tore madly into the office room."

The very atmosphere of the station now became distasteful to him. To shun it for the small hours that preceded the next train-time he decided on a walk through the village. A fierce sun was shining down, the roads were lifeless, only the din of industrial activity from the railway workhouses enlivened the cheerless aspect of the scene. He struck into a narrow path, proceeding aimlessly on till on the outskirts of a Haut his progress was arrested by the sight of a company of people bending over a game of cards. It was a species of four handed whist.

The sight touched a chord that vibrated in his bosom. He felt transfixed to the spot. Securing a convenient place near the gamesters he sat watching with lively interest the fall of each card, prompting now and then a happy hit. "This gentleman will make four" suggested a by-standers when one of the parties rose to depart. The proposal was accepted and down he sat a player at last.

"We must begin afresh" he said laughingly as he took the cards and shuffled them.

"Agreed" responded the opposite party.

"The cards were dealt out and the play began. The first game ended and the winnings were pretty equally divided.

"Let us play another round" he said excitedly and gathering up the cards packed and put them together in sorts with a dexterity which baffled the vigilance of his opponents. It was truly amusing to watch him turn up a card or lay it down or try his hand at a manoeuvre. The winnings went on for some time pretty equally balanced till the game turned in his favour.

"Hurrah?" he pealed out, a flush of excitement overspreading his countenance. "The chances are in our favour. Now whose turn is it to begin?"

"Mine" replied his partner as he moved a ten of spades. "Good" he complimented.

The contest grew hot. Both parties played with great spirit, as if their happiness or ruin depended on the chances of those coloured pieces of paper, but fortune was setting in completely in his favour.

"Bravo, my fine fellow" he cheered his partners, when the sixth card was played out and over the seventh the latter seemed to be in a pretty mess which to throw, "Strike home."

"It is unfair to throw out a hint." Protested his opponents.

"I am against it I assure you" he retorted sharply, but unhappily his partner made a slip which the opposite party turned to the best account.

"You hold a very bad hand, I'll be bound" he reprimanded. "I would not take you for a partner if only I knew you were a novice at cards. Move your cards with care. Don't blunder," he counselled him.

More games followed.

"I must warn you again" he broke out "Don't let our opponents have a glimpse of your hand? Here, I throw a red queen."

First, second, third—the seventh card was played out, luck still declaring in his favour.

"Chok-ka?" he pealed forth in high glee, throwing down the cards "Ha—ha—ha—"

"It is past four" observed a by-stander.

"Hush? don't bother." He rebuked. "Now gentlemen fortune is all on my side. Is n't it?"

The play ran high. A flash of triumphant pleasure lit up his eyes as he won one game after another. It was a run of luck, but in the infatuation he forgot that the next down was not long in coming.

"We must continue the play with good spirit" he rejoined gaily. "Here, I throw a black knave. Come on."

The play went on, but the tide of luck still running in his favour he gained at each turn.

"Hurrah?" he shouted out as a hotly contested game was coming to a close. "Smart my fine fellow, here I throw the king of spades with a bold hand."

Just then the sound of an approaching train was audible.

"I hear a train" said another.

"Hush. Pan-j-a-h," he rang out in exultation. "Cheer, cheer, ding-dong."

The play was continued with much ardour till twilight deepening obliged the party to break up. The cruel conviction now dawned upon him that the evening train was gone and he must either get home or back to the station.

"I will be hanged if the fates are not against me." He cried out in mingled rage and vexation and not relishing the idea of a

return home turned his face in the direction of the station. He could meet an uncle's black looks but not an angry wife.

It was fairly evening when the station was reached. The empty appearance of its waiting room was a sufficient advertisement that the next downtrain which was the night mail was long in coming. The sight of the platform recalling an unpleasant experience his legs carried him into the waiting room, but before throwing himself on one of its seats he paid a tribute to his daily habit of swallowing a pill of opium. The evening breeze was pleasant. By the law of animal economy weariness needs repose and opium, one knows, well, has a soporific effect on the human system. From a combination of these causes his eye-lids closed, his limbs relaxed and drowsiness took possession of him. In plain words, he fell asleep.

"Get out of here. Get out," a voice sounded from within. It was the booking clerk giving him a warm reception. "Oh pity me, in mercy pity me.—"

"Nonsense," the same voice rang again "Out? or the policeman will show you where to go."

"In the name of goodness, graciousness."—

"Ho! there," the clerk's voice pealed forth.

The clerk was serious. "Fly, fly."

The next moment he was seen lurking to a safe corner of the waiting hall venting his spleen in fierce oaths and dreadful execrations.

While he was thus occupied, the guard whistled, the engine screamed and the train rattled out of the station leaving him cry in the wilderness and cry himself hoarse.

PART III.

The next train was due at 3 p. m.

"Bless me! this is unlucky." He groaned, more than half-frantic at such a continued series of disappointments. Fully determined, however, not to miss another train he placed himself close to the blind in order to secure the 'bloody bit of paste board,' as he chose to call it, at the very first opportunity. To while away three tedious hours was no joke, yet it was got over and when

the time arrived he booked himself first of all, despite the press of a dense crowd, an achievement which he set down as the most arduous task ever accomplished by man.

The ticket secured, he swept to the platform and was lecturing to some fellow passengers on the necessity of a wholesale reform of the railway abuses, in the shape of a clean sweep of its booking clerks and ticket checkers and as an earnest of his decisiveness made a vow that if he lived to be the Burra Babu of his office his first care should be to rid the railway stations of those tag-rags and bob-tails as he chose to call them, but his speech was soon interrupted by the arrival of the train, when he found a new audience for it in a compartment of its inter-class carriage.

He now forgot all his troubles in the amusement afforded by the situation. Why, thought he, there was the ticket, what fear if the devil of a checker made his appearance. Sure enough his hopes were within a measurable distance of realisation. The thought was reassuring. His heart bounded with joy, his face brightened and his eyes were never more bright. Hurrah for Calcutta? Hip, hip, hurrah?

But where was his umbrella? confound it. There was the bag at his side, the ticket in his pocket and the cigar between his lips but the poor thing, where was it? It was missing.

"Bless me; this is very bad" he grunted and not willing to part with the old parasol rushed off to look for it but returned half-way to rescue his carpet bag from being conveyed to the metropolis without its owner.

He searched the station compound through and through. The waiting hall was subjected to a close examination. Even the platform was not spared. "How unfortunate, dear me, gross fatality" he murmured as he ran to and fro in quest of his inanimate companion,

"Ho, there what are you about" interrogated a slim Constable who was watching his discomfiture.

"Why, some one has run away with my umbrella" replied he mournfully.

"Look. Whose is that over there" responded the former, pointing to an old shabby umbrella against the door of the booking-office.

Thank goodness, it was recovered at last. Grasping it with

the fondness of a lover he strode back to the platform, but what sight met his eyes? God! the train was in motion.

"Halt, halt" he hallooed out with all his lungs "halt, halt"—waving his hand frantically in the air. But, as though in mockery, the iron horse only hissed and snorted and increased its speed to his immense chagrin and mortification.

He now swept down the platform in a state of frenzy yelling out "Station Babu" 'Station Babu,' forgetting in his confusion the proper address. The station master was not a Babu but a Briton. Unable to stand the impertinence of a nigger, especially as his susceptibilities were stung by the uncanny appellation, the haughty son of Albion ordered his underlings to *puckrow* him. To hear him was to obey. Ere another moment elapsed our hero was puckrowed in a right *jobburdust* way, shaken *achiesai* (আচ্ছিসে) and finally shoved out of the platform howling, cursing and calling Heaven to witness the Railway zooloom.

Now past seven, past eight, past nine and true to its hour the night mail came, pulled up and sped away, leaving him undisturbed in the enjoyment of a peaceful slumber.

Yes, he was fast asleep, nay more, dreaming. He dreamt that he was a Bazar Sircar at last, filling his pocket daily with silver and copper. It was Pujah time and he was come home with holiday finery for his wife, consisting among other things of a nice Parsee Saree and a bodice of blue black velvet. The Saree was of crimson silk ornamented with raised designs of exquisite workmanship. The bodice was delightful for Pujah wear. It was trimmed with flounces and golden lace; puffed daintily to the waist and its sleeves were finished off with an embroidered cuff. But pity, she turned away from the precious gift and instead of a radiant smile an act of cold reserve greeted his approach. 'Why darling' he began to fondle and caress her. But what a rough shake was it? He started up between sleep and waking. Surely she had indulged in a practical joke. "So cruel of you, dear" he complained lovingly and stretched out his hand for a sweet revenge. But God? Can his spouse have worn a Pagree? Can beard and a full blonde moustache have marred the oval of her Cherub face? Why, instead of the chiselled nostrils, the arched eye-brows and the long-bent lashes which finished her profile, it was a grim village staring hard at him.

Instead of dark silken tresses flowing in a hundred little curls about a face glowing in all its witchery of loveliness, it was a big uncouth turban half-hidding features which were any thing but comely? Was it a hallucination? A deception of the eyes? No, no, as certain as he was himself, it was a gaunt constable standing before him in an attitude which was by no means agreeable to his nerves.

He sat up, the better to realise the situation. The stern reality knocked the illusion out of his head that he was still in the railway station.

"When is the mail coming" he enquired diffidently.

"Which mail" was the rough interrogatory.

"The night mail."

"To-morrow night."

"You jest" remarked, our hero.

"I was never more serious" replied the Constable gravely "the last down, which was the mail for the night passed here an hour ago."

"Passed?" stared our hero in open-eyed surprise.

"Indeed" replied the former.

"My God" our hero fetched a deep sigh "any more train for the night, eh?"

"Not that I am aware of" replied the Constable.

"Allow me to rest here" pleaded our hero.

"Anything but that" was the curt reply.

Seizing his bag and umbrella our hero left the station none the worse for the adventure. The night was black and moonless and the faint stars shed but a feeble light to sparkle through the dense obscurity which hung over the face of the globe. A dead hush shrouded the scene as though all nature was locked in sleep. Not a voice sounded, not a door creaked, not a another soul stirred as he groped his way homeward, dreading every moment some grim spectre to loom up or a prowler to dispute his carpet bag, but no spectre, no robber retarded his progress and it was nearly midnight when he got home. Great rejoicing prevailed. The matron ran to the Toolseetollah to vow a splendid puja offering to the Deity for the success of her son's excursion. The housemaid stalked out of the house to see if she could procure *Harirnote* at that dead hour of the night. The house

was astir again. The housewife never looked more buoyant. The children cut a caper or tripped about in noisy commemoration of their father's achievement. But their exultation some died into a hush of despondency when our here told his story that he had missed all the trains for the day.

Needless to add that he never thought of a journey to the metropolis.

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AN OPIUM-EATER.

*PHILOSOPHY OF THAT MYSTIC VEDIC SYLLABLE,
"AUM."—II.*

CHAPTER II.

THE PHYSICAL ASPECT.

Those who are cognizant of the principles of the Indian yoga philosophy are well aware of the method of intonations to be adopted in pronouncing the syllable *Aum*, and the essential object to be attained thereby. The primary object to be attained in order to realize the *Turiya* stage of consciousness is concentration; and to bring in such a state of mental equilibrium a scientific method of intonation of *Aum* is necessary. There are many methods for attaining concentration, some of which are now adopted in the College of Surgeons in Paris, in producing atrophy of attention and hypnotic trances. But the Vedanta Philosophy requires from all its earnest students a proper control over the passions and emotions of man, which must be *perfected* by the proper chanting of the sacred syllable. The pronunciation of this syllable with the proper intonations produces complex and varied vibrations of the cerebral muscles and crystallize them, so to say, suchwise as to help in a great degree to control the emotions of the individual and to produce a lasting effect on the evolutionary march of the individual by the harmonious progress of both mind and body which are correlated to each other. This requires further elucidation.

The emotions of man and other animals have a physical aspect and depend in a great degree upon local physiological activities. The experiments of Darwin, '*On the Emotions and Expressions of Man and Animals*,' have conclusively shown that the outward expressions of emotions can easily be artificially produced by the help of electrical irritations applied to the centres of muscles, which are the seats of respective emotions. The subjective feelings of anger, hatred, mirth, laughter, etc.,

are really produced within, when the irritations are applied on the surface of the body, thereby stimulating their respective muscles. The difference between the outward *expressions* and the inward *emotions* is, only apparent, just as between *vibrations* and *sound*. It is only in the difference of the media of perceptions that the apparent distinction lies. The sound is not the *cause* of vibrations neither the latter can be the cause of the former, but the two are one and the same. The late professors W. K. Clifford and G. J. Romanes ('*Monism*,' '*Seeing and Thinking*') maintain the same monistic principle with respect also to the emotions and expressions. The outward expressions of *Surprise*, for instance, are the staring and vacant look, the half open lips, the inclination of the body, the temporary paralysis of the hands, etc. From the external symbols we judge of the existence of the inner psychological feeling. If by means of physical stimulants, the outward expressions of *Surprise* are produced, it is incontestable that the *feeling* of surprise exists within. The evidences adduced by Darwin in support of his theory conclusively prove that the exhibition or suppression of a psychological phenomenon is correlated with the activity or paralysis of the corresponding ganglionic centres of the muscles. In other words, if by any means, physical or psychological, a sufficient check is exerted upon the cranial seat of the expressions, the corresponding emotion can never arise. The question which we are directly concerned with, is, whether there are physical means, as for instance, the *continued forced vibrations* of the ganglionic centres, which constrain the growth and development of the organism suchwise as to completely meet our demand. The problem is an abstruse and complex one; the present state of the science of Acoustics is unable fully to cope with the problem. But we have sufficient evidences to arouse our interest and to make the path of elucidation more clear for future generations to discover more complete explanations. We make a little digression in order to explain, as briefly as possible, the evidences that are at present at our command.

Before proceeding any further we shall explain the meaning of certain technical expressions for the benefit of the readers without which it would be very difficult for them to have a proper comprehension of the subject. When a vibrating body, as for ins-

tance, a violin string produces a certain note, it executes a certain number of vibrations or oscillations in a second; this number of vibrations in a second is called the *frequency* of that note, and the greater the frequency the higher becomes the *pitch* of the note. So long as the elasticity and form of a vibratile body remain unchanged it always produces the same note of the same pitch called the *fundamental* tone of the body; and when they are modified the body produces another fundamental tone. When a vibratile body is once put in motion and left to itself, it goes on to vibrate owing to its own elasticity, the vibration is called *natural*, or *free*, and every time the frequency of its natural vibrations will be the same, producing every time the same fundamental tone. Under certain circumstances a vibratile body may be compelled to surrender its own preference for a particular mode of vibration, *i. e.*, its fundamental, or natural, and to vibrate with more or less accuracy in an arbitrary manner imposed upon it by external force, and the body is *forced* to vibrate at a rate determined by the exterior mechanism. If the rate of the *forced vibration* coincides with that of the natural or free vibration of the vibratile body, the oscillations become highly increased. This forced vibration plays a very important part in the building of organic structures alluded to before. Huyghens discovered that two clocks which did not keep time separately, kept time together when placed on the same table. Two different strings stretched on a musical board, slightly varying in their frequencies, will force one another to agree in their periods of vibration. This forced vibration, or more correctly, the series of impulses *ab externo* is, under certain circumstances, the cause of the *sympathetic* vibrations of other vibratile bodies. As we shall have to refer often to the *sympathy* or *sympathetic vibration*, we intend to explain the phenomenon more fully.

The external mechanism or agency which produces forced vibrations in a vibratile body may be a rotating-toothed-wheel, an electro-magnetic interruptor, placed on the body or another vibratile body placed on the same table, near the other, but not in actual contact with it. In the last case the vibratile body which takes the place of the external agency has its own natural frequency as the primary sounding-body has its own. When the former vibrates, impulses transmitted through the medium of air

impinge upon the latter and very slight or *no* effect is produced, *unless* their natural frequencies coincide; when the primary sounding body is *forced* to vibrate in its *natural* manner violently and this is called its *sympathetic* vibration. Two vibratile bodies of the same key-note, that is to say tuned to the same pitch, are said to be *sympathetically* connected with each other, and the vibrations of one of them cause violent oscillations of the other. Sympathetic vibrations are produced not only when the free vibrations of any two bodies are in unison, but also when the frequency of the one is a multiple or submultiple of that of the other. Two strings of a violin are tuned to two notes of respective frequencies 300 and 100. If the former is allowed to vibrate, the latter vibrates not as a whole, but divided into three segments. More of this later on.

There are two kinds of musical tones, the simple and the compound. When a tuning fork of a certain pitch is held in the hand, it can emit only one note, the fundamental. But when the same fork is placed on a board or box, the tone acquires a certain fulness, and though it produces the same fundamental tone it is accompanied with other tones of higher pitches which only trained ears can detect. These higher tones accompanied with the fundamental are called the *harmonics* or partial tones. The relation between the fundamental and its harmonics can be briefly explained as follows:—If the number of vibrations of the fundamental be represented by 1, those of the harmonics will be represented by 2, 3, 4, &c. The tones of all musical instruments are compound, and the same number of harmonics are not produced by any two different musical instruments. It is the presence or absence of a certain number of harmonics that gives the tone of a certain musical instrument its representative and individual character. If a violin emits the same tone as a piano, of the same fulness and strength, yet the hearer can easily detect the one from the other. The musical character or *timbre* of a violin is different from that of a piano, and this character only depends upon the harmonics produced. The harmonics produced depend upon the nature of the vibrating body and the freedom of motion allowed to all its separate parts. If the nature of the vibrating body remains the same, the tone produced will be of a different character when

it is put in motion by means of a bow applied at the middle, from that when it is plucked at a different part.

But there is a very peculiar function of notes in general with respect to the economy and organisation of life and even play the most important function in the building of the cosmos. Perhaps herein lies the solution of the mysterious meaning of "In the beginning there was Word and that Word was God." Volumes can be written upon this subject alone without diminishing its thrilling interest at all. The *rationale* of the constructive and destructive character of musical tones is to be found in the principle of sympathetic vibration previously explained. Musical tones affect not only inert matter but a growing organism as well; for, the latter is as much subject to natural law as the former. Even an iron bridge is built upon a key-note. The number of vibrations contained in that key-note or fundamental tone will respond to the same number of vibrations made upon the bridge by either a band of musicians or a body of men marching to the time of those vibrations; and it is an unwritten law, that marching organizations break step as they reach a bridge and a band of musicians ceases to play when about to cross it, lest the violent sympathetic vibrations of the bridge cause it to break just as large panes of glass in a cathedral break to pieces by violent sympathetic vibrations produced by choir-organs. A better illustration will be found in the experiments of Dr. Tyndall on running water, and on flames of gases. A running stream of water issuing from the mouth of a tap responds to certain notes only and instead of pursuing its course in an uninterrupted stream is resolved into drops, round or elongated as the case may be. The widening and flaring of gas jets by means of certain tones, the production of fantastic figures in flames all tend to show the universality of the constructive character of sound. The beautiful and symmetrical figures on vibrating plates by strewing sands on them, first discovered by Chladni, the destruction of the same figure when the plate is made to vibrate in a different manner and the formation of another figure of a very different type,—figures which are so very curious and complicated that they cannot be calculated beforehand even with the help of the higher differential equations and Bessel functions, although

with ease experimentally verified—all go to support the truth of our theory.

But if this constructive character of sound is efficient in the cases of solids, liquids and gases, is it not also efficient in the case of organisms? Although we are in want of a rigid scientific proof yet scientific presumption is on our side, the Law of Continuity supports the inference. There is an undisputed connection between the states of the mind and the arrangement of the cerebral particles. Excessive thinking, abnormal production of emotions, sudden changes of thoughts, etc., produce idiocy and insanity. Hence the question naturally arises, how far the configuration of the cerebral particles can be modified by *slow degrees*, as distinguished from sudden shocks or concussions, so as to maintain at will the predominance of certain thoughts to the total exclusion of certain others. There are some 'buzzing' notes which have a decided tendency to put the brain into a state of trance. Physically interpreted, this means that there are certain complex tones, which through the medium of the Cochlean canal and the Cortis' chords put the cerebral particles in such a state as to produce no *conscious* thoughts. It is universally recognised that the notes *E flat* and *B flat* are often required in composed pieces to generate softer-feelings; there are other pieces which contain generally *E* and *A* that produce bold and heroic emotions.

Dr. Wilkins in *The Progressive Thinker* shows beautifully this curious connection between musical tones and the human organism. Congeniality of human temperaments is nothing but sympathy of key-notes. "Low notes affect our lungs or the solar plexus, the continued sounding of that tone by another person has been known to put a sensitive person into a fit of coughing and continued for a long time has even given an attack of asthma. Another sensitive person having listened to the drum some moments has been obliged to press with much force with her hand upon the chest, as she said it seemed as though the drummer was pounding upon her own chest instead on the drum." The harsh and discordant noises (inharmonic notes) of a great commercial centre or city are the foundation of a clashing of ideas, prejudicial especially of persons suffering from diseases of the heart. "For many years music has been found to have a calming effect upon

the insane." Often the simplest melodies have brought sweet repose to the invalid suffering from the severest pain and torture. Prof. J. Jay Watson is the founder of this system of curing disease in Boston. Dryden has shown this remarkable power of Music in his *Alexander's Feast* :—

The trembling notes ascend the sky
And heavenly joys inspire.

With ravished ears
The monarch hears,
Assumes the god
Affects to nod
And seems to shake the spheres.

He chose a mournful Muse
Soft pity to infuse :

With down-cast looks the joyless victor sate,
Revolving in his altered soul
The various turns of Chance below ;
And now and then a sigh he stole
And tears began to flow.

Softly sweet, in Lydian measures
Soon he soothed his soul to pleasures.

The many rend the skies with loud applause,
So Love was crowned but Music won the cause.
The prince unable to conceal his pain,
Gazed on the fair
Who caused his care
And sigh'd and look'd, sigh'd and look'd,
Sigh'd and look'd and sigh'd again :
At length with love and wine at once
The vanquish'd victor sunk oppress'd upon her breast.

Hark, hark ! the horrid sound
Has raised up his head :
As awaked from the dead
And amazed he stares around.

Such instances can be multiplied indefinitely ; and these admit of only one explanation. The relation which subsists between a tone or a combination of tones, and the rise or fall of certain emotions is the relation of *sympathy* or *resonance*. A particular series of tones produces such sympathetically forced vibrations of the nerves, muscles, &c., constituting the seat of a certain emotion and changes the configuration of the cerebral particles in such a manner that that emotion or something allied becomes the only predominant one to the total or partial exclusion of other

emotions, the corresponding ganglionic centres of which are constrained to lie in a dormant state.

From the region of theory we descend now into the region of facts. We are given two unquestionable and well-defined data. On the one hand, it is admitted by all the Vedantic philosophers, as it is essentially a question of experimentation as well, that a peculiar quiescent state of the mind is produced by a continuous pronunciation of *Aum* with its proper intonations; on the other, we have the syllable itself with its necessary acoustical effects upon the vibrating portions of the nerves and muscles. Admitting these two limits as undeniable facts, we must explain by means of the universal causal nexus, the one by the other. The tones produced by vowels are numerous and they are actually calculated by Helmholtz (*'Sensations of Tone'*). His researches prove beyond question, that the production of any vowel sound depends *only* upon a certain and fixed combination of tones with other overtones. If there are arranged in a room a series of Helmholtz resonating globes, each of which responds to one and only one simple tone, but all of which taken together cover a series of octaves from the deepest bass to the shrillest treble of the human voice, if in such a room a full toned vowel a (ॐ) be distinctly uttered, then only certain resonators will respond, others remaining totally silent. The tones corresponding to those responding resonators are the components which can produce the vowel a. Helmholtz, taking together all these simple tones and combining them, has shown that these tones are more than sufficient to produce the actual intonation of the vowel a. If any one of the component tones is absent the note of the resulting vowel becomes *flat*, similar is the case with the vowel u (ॐ). But each component tone when it comes out of the human larynx through the vocal chords is, according to Fourier's theorem, accompanied with its series of harmonics or overtones. All these overtones with their mother fundamental tones, produced by A and U form such an exhausted series of tones as to include almost all the tones that are directly efficient in the growth and development of the human organism. (For particulars we refer the reader to Helmholtz' *Sensations of Tone* translated into English by Prof. Ellis). Add to this the series of tones that are produced by M,—a series of peculiar 'buzzing' tones which directly act on the

muscles and nerves of the ear and the nose. *M* can be uttered only at the time of *expiration*, so that the function of the olfactory nerves becomes arrested. A peculiar thrilling sensation is produced in the vocal chords, cardioid, thoroid, &c., and this vibration communicated to the auditory nerves through the Eustachean tube, compresses the air within this tube and makes the ear temporarily powerless to receive outer sounds; the effect being that the mind is shut out from the disturbing forces of the outer world, and a preliminary stage of that quiescent state of the mind, previously alluded to, is reached at, the primary object of *Aum*.

Our path from this point is intricate and narrow. It is impossible at the present state of science to determine in a direct or in an indirect way the actual interaction between the vibrations produced by *A*, *U*, and *M*, and those that are *forced* in the nerves and muscles within the *cranium*, the *seats* of the emotions of man. That the *forced vibrations* set up in those ganglionic centres leave behind a decided effect on the structures and configurations of nerves and muscles is unquestionable, especially when the constraining forces act upon a growing organism, subject to continual changes of the environment; and we confess that we have nothing but the precedence of scientific induction to support this view. The primary effect of the series of tones produced by *M* is a peculiar thrilling sensation in certain ganglionic centres of the brain which arrests for the time being the functions of other parts. The secondary effect of this temporary arrest is to reduce those benumbed ganglionic centres to a state of quiescence by means of which their corresponding subjective feelings find no scope to have a free play. If this state of things is allowed to take place for a prolonged interval and the practice is continued for months or years, sufficient time being allowed for the growth of the cerebral muscles, these muscles will grow and take such forms as to sympathetically vibrate in unison with those tones along which they have all along been forced to vibrate; in other words, a separate key-note will be *formed*. Consider now the exhaustive number of tones and overtones produced by *A* and *U*. The actual vibratory gyrations produced within the *cranium* is beyond all hope of investigation. We can only observe the effects produced on the *status* of feelings and emotions of persons who

constantly practice the intonation of the sacred syllable, and the effects are as we have described before.

A question may here arise, Is there no other word in the vocabulary of any language which can take the place of AUM? There are words to be found in the *Tantras* which can supplant the *Aum* but only in a partial manner; they are mere corrupt forms of AUM and their linguistic aspect is wanting. Besides from the physical or psychological point of view, their actions on the centres of emotions are not so complete, as can be perceived by any practical and earnest enquirer after practising on them for a few days, and the series of notes produced by those *Tantric mantras* are not so exhaustive as those of *Aum*.

THE HARMONICS OF THOUGHT.*

We need not suppose that by the utterance of this sacred syllable a total change of the cerebral configurations and ganglionic centres will be made, neither such a complete change is at all necessary. A very slight change of position or development of a cerebral particle is enough to change the mode and tenor of thought, and that this is actually the case we shall prove by the principle of 'Harmonics of Thought,' broadly explained in "*The Dynamics of Mind*." But for an adequate elucidation we begin by first explaining what harmonics of thought are, and in doing so we shall get the help of Acoustical examples.

We have defined the relation between the fundamental note with its harmonics. The production of a simple or only fundamental note unaccompanied with any harmonics at all is a very rare phenomenon in nature especially when the vibration of the vibrating body is a little complicated. It has been mathematically

* This region of psychology yet remains to be explored; and no one has yet approached the subject from the kinematical point of view except some members of the *Psychical Research Society* who only throw certain hints on the probable explanation of thought-transference and thought reading (Crookes, Lodge, &c.) The existence of 'harmonics of thought' is a mathematical certainty. It is hoped that a time may come when several misconceptions connected with the psychological association of will, will be corrected by the cognizance of 'harmonics of thought.' A thought is only the psychological counterpart of a complicated physical change of configuration of the brain, and this change is effected by molecular vibrations subject to the laws of kinematics. If the physical aspect of thought is some vibration just as sound and colour, then we must perforce admit the existence of thought-scales and harmonics of thought like sound-scales and colour-scales. In both these two scales only seven notes or colours are recognized for convenience, and the eighth entity is called an octave.

thoughts are produced,—but these are unconscious thoughts; hence they do not deserve the name. Being merely a psychological counterpart of a physical phenomenon, (the latter depending upon the configuration of the cerebral particles), thought with its harmonics does always exist in a live brain. It is by sheer force of the *will* that we can change the tenor of our thoughts, as every one experiences, and the application of this will entails a corresponding diminution of the cerebral energy. When an unrestrained scope is allowed to the full display of the cerebral energy one thought after another in continuous succession, uniformity and continuity is produced till at last when we try to change the course, we are surprised to find the nature of the ultimate thought and its relation with the primary and the fundamental with which the brain originally started. In this continuous succession of thoughts some fully conscious, some in less intensities while others in a semi-consciousness or wholly unconscious state, we notice the existence and influence of harmonics, the former of which is indubitable, the latter requiring psychological cogency and definition. Two persons, say A and B, are looking at a gold nugget. Here the primary or fundamental thought is that of gold briefly abbreviated as “gold-thought.” The thought which actually corresponds to the physical change within the brain is not a simple gold-thought but a gold-thought together with other thoughts pertaining to gold, corresponding to the harmonics of that primary thought, the whole constituting a *compound thought*. The compound thoughts of A and B can never be identically the same, though the fundamentals are. The harmonics depend upon the structure and configuration of the brain. The configuration of the cerebral particles of any two persons can never be identical, hence the harmonics must as a matter of mathematical necessity vary. Suppose that the brain of A can only produce the third, fifth, seventh &c. harmonics while that of B, the fourth, eighth, twelfth, and so on. Assuming as a matter of convenience the psychological interpretations of those vibrations, we say, that A thinks of gold, its beautiful colour, how it is produced in nature, the difficulties to be overcome in its collection, and so on; and that B thinks of gold, its fine polish in ornaments, its great value, it can be amassed by stealing, the possible ways of escape and so on. Now

notice the difference in the tenor of these two thoughts-scales. This difference lies in the difference of harmonics, or more correctly speaking, in the presence of certain cerebral particles which are capable only to produce corresponding harmonics, but a different development and configuration of which would have produced totally different harmonics and a different tenor of thought.

Thus we see that we can never abolish certain harmonics of thought if there exist in their positions certain cerebral particles capable to produce them, and that those harmonics can never at anytime arise if those particles or their positions be changed or distorted ever so slightly. Mild and continuous measures are only to be adopted for making any permanent change of positions of the molecules. Rude violent and sudden measures can only bring in loss of memory, lunacy, somnambulism and hypochondria. Two different measures can be adopted for the permanent change of a certain section of the cerebral configuration, *viz.* the physical and the psycho-physical. The physical measure consists in the continuous exertion of the force of the will entailing a constant activity of certain configurations to the total loss of others. This method is not only very difficult to be achieved in practice, but it also engenders certain permanent changes and one-sided development of the *will*. The other method, the psycho-physical is composed of two parts. In this, part of the energy of *will* is performed by the physical energy of the brain-molecules. The functions performed through the intonation of *Aum* have already been explained. Here not only the will has its power but it gets the help of the physical energy which goes a great way in helping the configurative change of the cerebral particles. The second method is therefore superior to the first, in bringing in not only a state of concentration without taxing heavily upon the mental energy, but producing such physical changes in the brain, as will not be capable to develop other thoughts prejudicial to the spiritual evolution of the individual.

This concentration, the first and the foremost object of the scientific culture of the human mind is thus perfected in *Aum*, and the further development of the inner import of the sacred syllable is explained in the *Psychological Aspect*.

R. K. B.

HINDU METAPHYSICS.—II. .

DIALOGUE BETWEEN A BRAHMIN AND AN EUROPEAN.

Eur. Since we last discussed the Sankhya philosophy, I have been thinking very closely on the subject of our conversation and I—but what do you smile at?

Br. I smile, my good friend, at your notion of thinking. It is little more than three weeks since the conversation to which you allude, took place, and in the course of that time you have been at five dinner parties, you have made an excursion to Brighton, and you have read four new novels, to say nothing of newspapers and magazines; you have also, I understand, made several good bargains at the Royal exchange. Now, what time can you possibly have had for thinking?

Eur. I have had abundance of time, notwithstanding all these occupations to think so much of your theories as to be assured that they are totally without foundation.

Br. If they be totally without foundation, why have you not overthrown them? Or rather why have they not fallen of themselves? You say you have thought, and the result of your thought is, that Sankhya philosophy is without foundation;—permit me now to remind you, that you have yourself, in our former conversation, laid the foundation of it, even in your principle that knowledge is power, and that the mind may progress to a point of which you have no conception. There is the foundation, now, do you retract what you then said? Do you think that the mind is incapable of all advance, or can you say positively, and for an unquestionable truth, how far it is capable of advancing?

Eur. I have no wish to retract anything I have formerly said, but I cannot see on what principle you can maintain that it is possible for a man to have attained unto irresistible will; dominion over all things, faculty of changing the course of nature, and ability to accomplish everything.

Br. I maintain these doctrines. I say again, on the principle which you yourself allow, namely, the power of the mind to improve and advance to an inconceivable and unlimited extent.

Eur. Yes; but when we speak of the power of the mind to improve and advance, we have reference merely to an exercise of its faculties; to the strengthening the discriminative faculty; to the strengthening of memory by practice and brightening the imaginative faculty. And it is easy enough to convince of this as being possible and rational; we have evidence of it, indeed, actual experiment, but your notions are absolutely outrageous and extravagant.

Br. May not the Sankhya philosophy appear to you outrageous and extravagant for want of thought on your part? You have never used the means to attain to the glorious object which it proposes.

Eur. What are the means, I pray you, for truly I should like to make the experiment, if I thought it possible that I could succeed, even in a degree. If I could make myself as tall as the monument I should make my fortune by letting myself out for a show.

Br. This is truly English, you are always meditating upon the means of making money. But it would cost you a fortune to build a house large enough to contain you.

Eur. Very true—and where should you find a tailor to make clothes for me?—I did not think of this.

Br. And yet you talked this minute of thinking very closely.—Now permit me to ask a question. If you have a desire to accomplish any object—a real and earnest desire—would you not naturally use the means of its accomplishment?

Eur. Certainly.

Br. Now, in our last conversation, perhaps you may recollect, you said that you did not think touching the moon with the tip of your finger to be so very desirable as to surrender every thing else for the sake of it?

Eur. That is still my feeling;—yet to make myself as tall as the monument is comparatively nothing to touching the moon with my hand.

Br. Ah, I see how it is; you are disposed to use our philosophy as you Christians are too much in the habit of using

your religion ; you will just take a little of it, so much as will not interfere very seriously with your worldly pursuits. You people of Europe are mightily calculating :—you have been computing that if to reach the moon you would take your whole life and your whole thought, it would require a very short time and a very little to grow as tall as the mounment.

Eur. I must confess, that is any feeling.

Br. And yet I fear that, even for so small a growth as the height of the mounment, you would scarcely have the patience to use the means ;—for all the attention and all the thoughts are required, and the mind must not wander away to foreign objects. If you were to hear of the arrival of an Indian fleet in the river, you would be interrupted in the most profound contemplation that you could possibly be engaged in, and I much question whether a card of invitation to dine at the Mansion House would not put to flight all your philosophy, as the firing of a gun disperses the crows from one of your corn-fields.

Eur. I think if I had an object to attain and a desire to attain it, I could patiently use the means.

Br. Do you really and truly think you could keep your eyes resolutely fixed on the top of your nose, when the *Times* newspaper is brought into your apartment ? Would not your curiosity be prompted to take a peep at the price of stocks ?

Eur. Now, indeed, you are only laughing at me. For what can the keeping my eyes fixed in the top of my nose have to do with the attaining of a transcendental power ?

Br. It has very much indeed to do with to attaining of transcendental power. I beseech you to make trial.

Eur. For how long a time ?

Br. Say for ten or fifteen years.

Eur. For ten or fifteen years ! I should be weary of it in less than as many minutes.

Br. Or, if you prefer it, you may sit with your hands folded above your head for the same time.

Eur. I should lose the use of my arms.

Br. But you would recover their use by the time that you grew to the height of the mounment.

Eur. And not before, I think. But are you quite sure that in ten or fifteen years I should be as tall as the monumment ?

Br. I am not quite sure ; but if you should not find fifteen years long enough, you might try thirty.

Eur. Oh, most possible ! what a dreadful penance your philosophy imposes ?

Br. Say, rather, what a glorious object not at all commensurate with the labour required to attain it.

Eur. On the contrary, it seems to me that the object which it proposes is infinitely beyond the labour which it imposes ; because it gives you all things for the sacrifice of all things.

Eur. But if it might take one thirty years to reach the height of the monument, how long would it take me to reach the moon ?

Br. Concerning the time which it might take to accomplish such things, I may not speak positively ; for modern writers doubt, considering the shortness of life, whether the end can be gained in the present age. However, if you have any doubts, you may try.

Eur. Have you ever tried yourself ?

Br. I have not, because I have no doubt I am content with my present stature and my present powers, and as I do not question the dogmas of our philosophers, I make no efforts after greater power or loftier stature.

Eur. And, I think, I may as well be content also.

Br. Yes, but your content arises only from doubt and scepticism. I know that, such is European ambition, you would undergo much in order to obtain dominion over all things.

Eur. I acknowledge that I do doubt—or, I should speak more correctly if I said that I do not doubt, but rather I feel as absurd, that there is no verity whatever in your philosophy ; that it altogether a thing of the imagination—a wandering of the fancy. It is so essentially absurd—so totally out of nature.

Br. Excuse me, my good friend, excuse me—but I must say that you Europeans know nothing at all of what is in nature or out of nature. You are art all over ; you give no time to contemplation ; you spend all of your time and thoughts merely and entirely on the surface of things ; you give your undivided attention to that which concerns the body only ; your very minds are bodily, and what you call improving the mind is merely sticking the memory all over with a multitude of facts, which are too numerous to sink into the mind or produce any effect in it. You

read so much that you can never think, and you are so absorbed in politics and merchandize, that absolutely you do not believe in the existence of mind or philosophy.

Eur. I confess there may be some truth in what you say.

Br. Ay, very great truth, and that in almost every individual, yourself not excepted. Your minds are of no use to you. You think only with your bodies, and all your thoughts are merely recollections of bodily sensations. You believe in nothing that may not be seen, heard, felt, smelled, or tasted. So far from making any endeavour to render yourselves more spiritual, to deliver yourselves from the body and rise to a glorious transcendentalism, you give all diligence to make your bodies more entirely the prisons and dungeous of your minds.

Eur. This is rather severe, though perhaps not entirely unjust. But may there not be an opposite error, in so far abstracting the mind from that which is visible and rational as to fill it with all manner of useless speculations and extravagant notions? And is it not possible to be too negligent of the body as to be too negligent of the mind?

Br. Is this your mode of reasoning? Do you think, because a little stillness and abstraction produces truth, a great deal will generate falsehood?

Eur. I think that the continued application of the mind to one object may be the means of producing a certain degree of absorption more favourable to fancy than to truth. Intellect requires comparison, and comparison requires many objects to be presented to the mind.

Br. But the mind can know nothing of that which is hastily presented and as hastily withdrawn. You know too much to know anything. You say you know that there is no truth in our Sankhya philosophy; now let me as a friend implore you as a lover of truth to keep your eyes fixed upon your nose for ten years, just by way of experiment, and I feel convinced that, at the end of that period, you will entertain a different opinion of the Sankhya philosophy from what you do now.

Eur. Nay, nay, you are too unreasonable in your request. How would you like to do so yourself?

Br. In my search after the true philosophy I might be willing; but, as I am a believer in it, I cannot make the experiment.

Eur. And I believe, if I were to make the experiment, it would fail for want of faith.

Br Well then, now I see how it is, you are fully determined that you will not believe, and you will not use any means by which you may convince yourself; yet, with all this inveterate and obstinate prejudice, you plume yourself on being rational. Surely, I have never met with any people under the Sun more prejudiced and narrow-mined than you people of Europe! And, I daresay that you fancy yourself a bit of a philosopher, were it for questioning the truth of our system, and for speaking of it sceptically and superficially. Now, I shall meet you again soon, and then I will have a little close talk with you? and I must beg of you, that you will endeavour to be truly rational, and either to deny at once the existence of mind, or be prepared to allow its power.

Eur. I must beg that you will not call me prejudiced? I am open to conviction.

Br. Nay, you are not open to conviction, because you will not allow the consequences of your own premises, when they seem to lead to my conclusions. But we shall meet again.

A. J.

REVIEW OF BOOKS.

*Sukhada—by J. R. Bhattacharja, M. A —published at the
Methodist Publishing House, Calcutta.*

This is 'a domestic story of a rather novel character. It aims at holding up a faithful picture of the domestic life of the educated class of the Christian community of Bengal. The characters are all Christians and the writer only now and then hints at the existence of the great world of non-Christians, which encompasses his beloved oasis of native Christians on all sides. He is absorbed in the study of a single section of the great vein. But we are glad to find that what he has lost in breadth, he has gained in depth.

The sentiments expressed throughout the book are very good.

Sukhada is the ideal of an educated Christian lady. In tact, ability and nicety of judgment she is all that can be desired of her. There is a halo of womanly grace and modest dignity about her which she maintains all along. Dharendra's character has been happily conceived. The story, however, is really readable and interesting.

*Studies—by B. C. Mahtab—printed and published by
W. Newman & Co., Calcutta.*

This is a book written by the young Maharaja of Burdwan. It is a collection of short essays of merit on the current topics of the day. It deserves notice not only on account of its intrinsic importance but on account of the fact of its serving as a sign of the times. It shows that the Zemindars of Bengal no longer maintain an attitude of stolid indifference towards the world at large. They have begun to take an intelligent interest in what concerns them as well as other people. Brought up, as the Maharajah is, under the eye of his distinguished father Raja Banbehari Kapur, he bids fair to prove himself equal in every respect to the unique position which the Burdwan Raj has always enjoyed among the Zemindars of Bengal.

Before making any remark on the subject-matter of the book, we cannot help regretting the acrimonious tone of the author's note. There is a bitterness of feeling in it. Critics are always critics and criticism sometimes, we must painfully acknowledge, reduces to the level of unlicensed abuse. But at all events, there can be no doubt that a man, while justifying himself, should remain perfectly calm instead of being led away by his anger to a wholesale condemnation of a particular class. Porson says, "Those who have failed as painters turn picture cleaners." Again Landor says, "The eyes of critics, whether in commending or carping, are both on one side like a turbot's."

Marie Corelli also in her "Sorrows of Satan" gives a vivid description of press criticism and its effects.

The so-called critics generally disappoint authors—specially young men.

The essays embrace a wide variety of topics. They are treated with ability but we must not expect a commanding grasp of the many problems which suggest themselves at every step, from our young Maharaja. In fulness of time, we may fairly expect, if our young Maharaja persists in thinking over these knotty problems, that he will be able to do ample justice to them.

Some of the pieces *viz.*, The modern Husbandmen of Bengal, Prostitution in Bengal, Defects of modern education in Bengal, the Pasture lands etc., in Bengal, the Zemindars of Bengal, disarm criticism and with reference to them, we presume there can be no difference of opinion which is unavoidable in the case of such social topics as Widow Marriage, etc. We must not judge the Maharajah too severely. We must admit that sincere opinions of others should be respected and that ours are not infallible. Obstinate conservatism is unreasonable. It is uncharitable to find fault with the Maharaja because he has given his earnest thoughts to subjects which we never care to handle and which we do not like others to discuss. It is clear from the preface that whatever difference of opinion there may be on various points, the author is above blame.

To do justice to the Maharaja, we are bound to say that the essays are very suggestive and they reflect credit on the author. The get-up is excellent—in fact, it may be said to be artistic.

The Smart Set—July, 1904,—printed and published by the Smart Set Publishing Company Limited, Fleet Street, E. C. London.

When the future historian comes to write the history of English literature in the 19th century, the rise of the magazine will undoubtedly occupy an important chapter in it. Some of the best books of the day first appeared in some magazine by periodical instalments. Some of the best writers of the day were in the beginning regular contributors to a magazine or a dozen magazines, before blossoming form into an author before the gaze of the delighted public. Hence the magazine may be said to be the training-ground for future genius at the present day. Of course, there is a great deal in it, which is not likely to outlive the hour which brought it forth. This is however unavoidable from the very nature of the case. At all events magazines are very popular just now and they have in a great degree replaced fiction. There are many first class magazines in England, and we have no doubt that if properly conducted, the Smart Set will, in future, rank as one of them. Some of the stories in this volume are really clear. The hand of a budding genius, is indeed, visible in some of them. The stories however, are all of the same colour. A little variety is desirable. On the whole, it seems to us that, the periodical will command a large sale.

Three articles—by S. M. Mitra, M. R. A. S., Hyderabad, Deccan.

The Editor of the "Deccan Post," has published three articles written by himself between November 1902 and March, 1903, under the above title.

They are of varying merit. The article on the cultivation of Indian vernaculars seems to us to be the most sound with respect to the correctness of the views advocated therein. It is written to controvert Dr. B. D. Basu's project of making the vernacular the medium of instruction in every province in India and of relegating English to the position occupied by Sanskrit and Arabic at the present time. In the course of this article, Mr. Mitra vigorously and ably disputes Dr. Basu's statement that no vernacular literature worthy of the name has sprung up in India. It is not quite clear, however, where Mr. Mitra wishes to place the vernacular in his scheme of education. While there is no doubt that the Eng-

lish language has materially contributed to the development of our own vernacular, it will, in our opinion, retard in no small degree its future development, in case it is ignored altogether by the educational authorities of the country. In the second article (Keeping caste in England)—though we agree in the main with his remarks—it is by no means clear to us that he has made good his position. We don't see why the spirit of the caste system can not be followed by an Indian in England or why he "should live an English life" there. If the spirit of the caste system means anything, it means at least this (whatever else it may also mean)—that an Indian should on no account sink his own nationality by adopting the western mode of living. But Mr. Mitra wants this very thing. So, it is no wonder if he has fallen out with the caste system itself. The third article—Mr. Dutt and Indian famines—is devoted in the main to refuting one statement of Mr. Dutt in his "Economic History of British India"—*viz.*—that "the famines which have desolated India within the last quarter of the 19th century are unexampled in their extent and intensity in the history of ancient or modern times." Mr. Mitra has quoted in support of his own contention a few lines from some Mahamadan historians, showing that there occurred during the Mahamadan Period famines so severe that man devoured man. This seems to Mr. Mitra to be conclusive, but it does not by any means seem so to us. With the exception of the fact of man devouring man, there is nothing to show that the famines of those days were more intense than those of the modern times. Mr. Mitra has not been able to prove that the mortality was heavier or that the famines were more widespread.

One thing, however, is beyond dispute—*viz.* that the suffering of the people then could not have exceeded in intensity what is experienced now; for there is a limit to suffering as well as to anything else and the limit was reached in the late famines. Moreover, we have now a paternal Government to open relief works for the succour of the distressed. A thousand other things contribute to lessen their suffering. As for man devouring man, it points, not so much to the intensity of the famines as to the lawlessness that then prevailed, and the fierce nature of the populace.

Besides this, Mr. Mitra makes no attempt to explain one fact *viz.* why famines are so much more frequent now than formerly,

during the Mahamadan regime. On the whole, however, these short articles repay perusal richly. They are very suggestive, while the style is really good.

*The Jogi and his message—by Swami Dharmananda Mahabharati
—published by Goswami J, J. Bharati.*

In this booklet, Swami D. Mahabharati has incorporated the substance of two lectures delivered in the U. P. Mission church and the Oxford Mission Hall respectively. It is designed to prove that Jesus Christ was the ideal Jogi and his message is embodied in the New Testament. Swami Dharmananda exhorts us to read the Bible carefully. The Swami has not, however, defined his own position quite clearly.

He says that he is a "Hindu of Hindu"—that he has no sympathy with the Neo-Hindu movement, which ignores the claim of the Vedas to divinity—and that he is a warm believer in the efficacy of the Joga system in enabling us to attain emancipation. And yet this doughty supporter of Vedic Hinduism—this "Hindu of all Hindus" is in favour of establishing Christianity in India. He makes certain interesting statements (*e. g.* that Christ visited India and that the "wise men from the East" were Hindus) which he does not attempt to verify. Had he devoted himself to proving these, he would have done a greater service to the cause of religious literature of India. As it is, his book is a medley. His motive in writing this book is not clearly perceptible. One thing, however, is quite apparent. Swami Mahabharati is a man of a truly religious, if not of a philosophic, turn of mind. On the whole, the booklet is worth reading.

The Forester—Vol. XXV, No. 5—Toronto, May, 1904.

The Forester is the official organ of the Independent Order of Foresters, which was founded on the 17th June, 1874 and licensed by Insurance Department of Canada in May 1896.

The editor-in-chief is Mr. Orouhyatekha M.D., G.P.S., C.R. We learn from this volume that the surplus in the Treasury on the 1st May, 1904 was \$156,125-17s-8d. and that the Order is in a very prosperous condition, having secured more new members in 1903 than the three old companies of Canada put together.

Its principles are to furnish safe and permanent Insurance Benefits to the companion Foresters at the lowest possible cost consistent with safety. In the year 1904, the Order gained one thousand and twenty six new members and the supreme chief Ranger was welcomed home to Toronto by thousands of people. The gathering was notable, from the presence of the Premier of Ontario, Hon. Geo. W. Ross. The volume before us contains an interesting account of the reception. It also contains a host of interesting things connected with the Order and is worth-reading.

Adim Kayastha Sabha.

This is a report of the proceedings of the *Adim Kayastha Sabha* (or the Society established recently for ascertaining the origin of the Kayasthas of Bengal) and of the decisions arrived at by it after due deliberation.

It is well-known that the question of the origin of the Kayasthas has occasioned a great deal of hot controversy, the great body of Kayasthas setting up to be the direct descendants of the Kshatriyas and to claiming to have a right to wear the sacred thread.

It was necessary, however, to obtain the sanction of the Brahmans, for this purpose. But the latter were as ready to refute the so-called proofs as they were to advance them. To an impartial observer, however, most of the proofs as well as their refutations appear to be of a very flimsy character. But a section of the Kayasthas were possessed with a rage for being decorated with the holy thread. The controversy threatened to assume monstrous proportions when the *Adim Kayastha Sabha* came to the rescue. The leading Kayasthas of the city have been enrolled as its members and its decision has commenced itself, not only to the general public but to the great majority of the Pandits of Bengal, who have approved of it as following the dictates of the *Shastras*. The Kayasthas form (according to the opinion of the Sabha) a distinct caste and they should not be identified either with the Kshatriyas or the Sudras. The society holds its meetings in the premises No. 3, Prosonno Kumar Tagore's Street, Pathuriaghatta. Babu Behary Lall Mitra is the President and Babu Kunja Lal Roy is the Secretary.

The First Annual Report of the People's Association, Janai, for the year ending September, 1902—published by the Executive Committee of the People's Association, Janai.

This is the first annual report of the People's Association, Janai, which was established in September 1901. It contains a short account of the progress made by Janai in recent years and sets forth the objects of the association which are briefly, "to secure the good of the locality in particular and of the country in general—to interpret between the rulers and the ruled and to elevate the moral tone of our society." The formation of such associations for the amelioration of the political and the social condition of the people belonging to the village or town, is, indeed a hopeful sign. It shows that the people are learning to form combinations for attaining a common object—in a word, they are learning self-help.

What the Janai Association has been able to do within the limited space of one year is, indeed, praiseworthy. The most prominent citizens of Janai and the adjoining villages have enrolled themselves as its members. We have no doubt that the Association has a prosperous future before it and we heartily wish it every success.

The Nineteenth and Twentieth Annual Reports of Sabhabazar Benevolent Society. (Registered under Act XXI of 1860) for the years 1902, 1903-04 Office, 106-1 Grey Street.

The Sabhabazar Benevolent Society was started on the 31st January, 1884. Its object is "the distribution of organised charity to the really deserving amongst the respectable poor of our community, irrespective of caste and creed" During these twenty years, it has done such good work as to abundantly justify its existence as a Charitable Institution. The list of recipients of the aid furnished by the Society is very large and shows very clearly that the sphere of the Society's work is not confined to Calcutta. The finances are in a very prosperous condition; but it needs more subscriptions for the regular distribution of its grants to its recipients.

The object of the Society is not doubt very noble and we have no hesitation in recommending it to public as an object constantly worthy of their patronage.

Kamala—a monthly vernacular periodical—printed and published by G. C. Bose & Co., Bose Press, 63 Bechoo Chatterjee's Street, Calcutta. Nos 1 to 5, Part I.

The issues under review contain a good many readable articles by well-experienced writers. There are a number of good illustrations and the articles on trade, commerce and science are very interesting and ably written. We wish the periodical every success. If well conducted, it will, we venture to think be one of the leading vernacular journals of the day.

The Indian Review—edited by G. A. Natesan & Co., Esplanade, Madras. Vol. 6. No. 1.

The number before us contains 16 articles by European and Indian writers.—“India and Free Trade” reproduced from the Right Hon. Lord Avebury P.C.’s book is very interesting.

Besides a few literary and commercial articles, a number of short articles on Indian and foreign politics have found place in this number. The Revival of Theosophy by Miss L. M. Yates deserves special mention. The glossary of information on various subjects appended to the end and the “cuttings” are very good. We wish our contemporary a prosperous future.

The Hindustan Review and Kayastha Samachar—Vol. viii. no. 5. Edited by S. Sinha, Bar-at-law—printed at the Indian Press, Allahabad and published by Munshi Durga Pershad of the Kayastha Pathshala, Allahabad.

The issue under review opens with the Editor’s remarks on the criticisms of the ‘Mysore constitution.’ Mr. Sinha’s suggestions are very good and of great practical value. “Ram Mohan Ray II and His characteristics” by Pandit Siva Nath Shastri M.A., of Bengal will no doubt interest every Bengali-knowing people. The notes, notices and jottings are unexceptionable.

In the end a monthly account of the Kayastha Conference of the N. W. P. has been given.

Buddha Deva—by Satesh Chandra Bidya Bhushan M.A.—printed and published by G. C. Bose & Co., Bose Press, 63, Bechoo Chatterjee's Street, Calcutta.

This is an important publication of the Sahitya Ratna Granthalali series. With a view to encourage the growth of a healthy literature, Messrs. G. C. Bose & Co., have undertaken to publish works on History, Antiquity, Biography, Philosophy &c. &c., under the guidance of a number of well-reputed writers.

This enterprising firm deserves public encouragement which we have reason to think they will gain ere long. Their present production is an excellent contribution to the Bengali literature. The work is well-printed and nicely got-up. The illustrations reflect credit upon the firm. The price in consideration of the importance and getting-up of the book is not much. Neither the author nor the subject of the book requires a special introduction at our hands.

NATIONAL MAGAZINE

No. 12.—DECEMBER, 1904.

*ADMINISTRATION OF THE AFFAIRS OF CEYLON,
1896-1903.*

[EXTRACT FROM HIS EXCELLENCY SIR WEST RIDGEWAY'S REVIEW.]

IX.

THE CLERICAL SERVICE.

The success which so speedily followed the re-organization of the Civil Service tempted me to apply the same system to the Clerical Service, whose members laboured under grievances very similar to those of the Gov. Servants before the re-classification.

The whole Clerical Establishment is now divided into four classes. The highest class includes appointments of Rs. 3,000 and upwards, and the lowest class appointments begin at Rs. 500 and rise to Rs. 1,100. For each class a system of increments is adopted, and promotion from a lower to a higher class is by merit and seniority combined. The incremental system is a great advantage over that formerly in vogue, in that it enables an officer who works satisfactorily to earn a salary of Rs. 3,000 at the end of nine years' service, without any special consideration as before. At the end of 29 years' service, a clerk can obtain a salary of Rs. 2,400. The new scheme is a great advantage of securing to departments their trained staff, and of making a series of moves on the occurrence of a vacancy, with the result that the expenditure on transfers is considerably reduced. The same system has been introduced into the so-called "close"

departments, such as the Survey, Postal and Telegraph, and the Railway.

Further relief has been granted to clerks in Colombo offices by the issue of railway season tickets at a quarter the ordinary rates. This has helped to remove the inequality under which these officers laboured owing to the exorbitant house rents demanded in Colombo, and has enabled them to live in healthier and cheaper quarters many miles away from the Fort.

It is a great satisfaction to me if by the re-organization of the Clerical Service and the grant of these reduced railway fares I have been able to effect some improvement in the positions and prospects of a meritorious and valuable body of public servants.

WIDOWS' AND ORPHANS' PENSION FUND.

The work of investigating the financial condition of the fund was entrusted to the present actuaries in 1899, and their report, which was issued at the end of the following year, deals with the position of affairs on the 31st December, 1898. The balance to the credit of the fund at that date was Rs. 2,155,748, and the actuaries, after making a valuation of the assets and liabilities, arrived at the conclusion that there was a surplus of nearly Rs. 600,000.

In accordance with the recommendations of the actuaries, they were instructed by the Secretary of State to proceed with the revision of the tables, but in February, 1901, it was decided to defer further investigation of the Ceylon tables pending the compilation of a general table based on the records, not only of the Ceylon fund, but of cognate funds in other colonies. This unfortunately necessitated further delay, and it was not until February of this year that the Secretary of State was able to transmit revised tables to Ceylon. It was then found that the proposed new tables, namely those in use in Jamaica, would involve an alteration in the Ceylon rule as to the period of contribution. It was at the same time suggested that Government should take over the whole responsibility for the fund, guaranteeing the pensions on the new tables.

Both these proposals—namely, the adoption of the Jamaica tables and the transfer of the fund to Government—were emphatically condemned by the Directors. They pointed out that, although in the report of 4th November, 1900, from which I have quoted, the actuaries stated that new momentary tables should be prepared

"with a view to the distribution of the surplus," this object would not be obtained to any appreciable extent by the adoption of the Jamaica tables, while in some cases the beneficiaries would be actually worse off than at present.

The main point insisted upon by the Directors was that the actuaries had apparently failed to appreciate the significance of the extraordinarily large balance to the credit of the fund. This balance, as I have already remarked, has grown from Rs. 2,155,748 on 31st December, 1898, to Rs. 3,269,787 on 31st December 1902, and is increasing at the rate of Rs. 300,000 annually, an amount nearly four times the total at present paid away in pensions. For the utilization of this accumulated surplus the Jamaica system appear to supply no additional facility. There is no complaint of inequalities in the amounts paid to individuals under different circumstances but it is contended that the total amount disbursed by the fund is in no way commensurate with that received. The accounts of the fund show, it is urged, that the present pensions could be doubled, either by making full use of the interest on the reserve without drawing more from the contributions, or by making full use of the contributions without touching the interest on the reserve, and that in view of these facts it is indisputable that the contributors or beneficiaries, or both, are entitled to some substantial concession.

The Directors were opposed to the suggestion that the Colonial Government should take over the whole responsibility for the fund, guaranteeing the pensions on the new tables to be issued, on the ground that, even assuming that this radical change could be legitimately effected without the concurrence of the contributors, there seemed to be no reason to doubt the efficiency and economy of the present management, while, if the fund in its present exceedingly flourishing condition were taken over by Government without very substantial amelioration of the existing pensions, Government would lay itself open to the charge of breach of faith. It must, however, be admitted that Government has been unnecessarily liberal in paying interest at 6 per cent. on the reserve, which can only be re-invested at $3\frac{1}{2}$ or 4 per cent., and it is proposed, therefore, that in any re-adjustment scheme which may be adopted ~~per cent.~~ should be reserved to Government to reduce the rate to $3\frac{1}{2}$ per cent. when and for so long as the actuaries advise that ~~this can~~ safely be done.

In reporting on the question to the Secretary of State I placed the above considerations fully before him. Mr. Chamberlain's reply, forwarding the actuaries' answers to the criticisms and recommendations of the Directors, is now under the consideration of Government. In such matters as these we are, of course, necessarily in the hands of expert advisers to a very large extent: the experts in this case are the actuaries of the fund, and we cannot lightly dismiss, even where we are not wholly able to follow, arguments which are based on fundamental principles of actuarial calculation. For example, the actuaries remind us that even now the fund has been in operation less than twenty years, and they contend that a period of, say, thirty-five to forty years, dating from its establishment, must elapse before the full extent of the fund's liabilities can be gauged with accuracy, and that in the meantime the pension list may increase with greater rapidity than in the past. We shall be right, therefore, in proceeding with caution in the matter, but the accumulated surplus is so large, and the annual accretions to that surplus so far in excess of the total amount of pensions paid, that I cannot doubt that the grant of very material concessions would not be inconsistent with even the most cautious re-arrangement.

No one regrets more than I do the delay which has unfortunately taken place in this important matter, but I hope that a final settlement is now not far distant, and I sincerely trust that it may fall to the lot of my successor to announce before many more months elapse that substantial relief has at length been afforded.

CHANGES IN THE PUBLIC SERVICE.

It is only natural, in view of the length to which my term of office has extended, that I should have seen an exceptional number of changes in the Public Service since I first arrived among you. Were it not that I believe each succeeding generation to be actuated by the same desire to serve the Colony faithfully, and loyally to assist its Governor, I might well experience a sense of isolation as I look around me to-day. Nowhere does the consciousness of this isolation force itself upon me with such insistence as in this chamber. Of the seventeen members of this assembly who surrounded me when I delivered my first address almost exactly seven years ago, but one occupies a place in the Legislative Council of to-day. Sir Edward Noel Walker retired in 1901 after serving the Colony as

Lieutenant-Governor and Colonial Secretary with untiring faithfulness since 1887.

As in the Legislative Council so in the Executive I am the only connecting link between now and 1896. Indeed, with the exception of Sir Charles Layard, not a single member of the Council is now in the Island. But there have never been wanting able men to fill the vacancies as they arose.

Except in the Executive and Legislative Councils, nowhere have the changes in *personnel* been so marked as in the Supreme Court. Sir John Winfield Bonser relinquished the post of Chief Justice in 1902 on being appointed a member of the Judicial Committee of the Privy Council, while both the Puisne Justices, Sir Archibald Lawrie and Mr. G. H. Withers, have retired, the former after a distinguished service of twenty-seven years. The Supreme Court bench has been strengthened by the appointment of a fourth judge, and now consists of Sir Charles Layard and Mr. Wendt, two gentlemen of long and honourable connection with the Island, and the Honourable F. C. Moncreiff and Mr. J. P. Middleton, welcome additions to our ranks from other colonies.

The Civil Service has naturally undergone many changes. Of the officers who were in the first class in 1896, Mr. Cameron and Mr. Ievers alone remain. Since I arrived here in January, 1896, thirty civil servants, or not far short of half the total strength of the service, have either retired, been transferred to other colonies, or have died.

Just prior to my appointment as governor of this first of Eastern colonies a change of some importance was introduced at home in the manner of selection of candidates for the civil services of Ceylon, Hongkong, and the Straits Settlements. Hitherto there had been a special examination for these colonial cadetships as they are called, but in 1895 Mr. Chamberlain decided that the examination should in future be held simultaneously, and be in fact identical, with the competitive examination for the Indian Civil Service. The first examination under the new regulations was held in 1896, so that all the young civil servants who have joined since my assumption of office have been recruited from precisely the same class as the members of the justly appreciated Indian Civil Service. There is no necessity for me to institute comparisons between the types of officers produced under the old system and the existing one—indeed,

such a comparison would obviously be premature—but, if I may say so without in any way appearing to disparage many able and trusted senior members of the Service, I would venture to express my satisfaction that under the new system you obtain the services of so many University men. Of the twenty-one men who have joined the Civil Service since I first arrived in Ceylon, fifteen were at Oxford or Cambridge.

In concluding this brief summary of the changes which have taken place in the Public Service during the period of my administration, I venture to invite your attention to two points in which I have taken a special personal interest. The first of these is the increase in the number of Ceylonese gentlemen who now hold superior appointments under Government. It has been my constant desire and endeavour to satisfy, whenever possible, the aspirations of the Ceylonese to such appointments, aspirations which appear to me to be not only legitimate, but deserving of every encouragement. It is a great satisfaction to me that there has been a notable increase in the number of provincially recruited Government servants, who have, with few exceptions, fully justified their selection. Whereas in 1896 there were only thirty-nine Ceylonese holding superior appointments, there are now sixty-three, including one of the judges on the bench of the Supreme Court and twenty-two gentlemen holding posts in the Civil Service.

The other point in connection with the Public Service in which I have taken a special interest is the question of retirement on pension. You are aware that, except in the case of ill-health, an officer does not qualify for pension until he is 55 years of age. Instances, however, are not wanting in which, while the officer's health cannot be said to have broken down, his usefulness is irretrievably impaired owing to long residence in the tropics or other causes some considerable time before he has reached 55, yet under the system which existed in 1896 he could not retire without forfeiting all right to pension. In other words, inefficiency occupied an almost impregnable position. "There will always recur," I wrote to the Secretary of State in 1897, "so long as human nature is human nature, cases of inefficiency which it is not possible to deal with severely. For instance, it would be difficult for any Governor, however inflexible, to drive into penury and distress an officer who may have become incapacitated by long and faithful service, but who may not yet be qualified for an ade-

quate pension. In theory the principle of unrelenting and procrustean justice is very proper and effective, but in practice it is capable of only partial application. For gross inefficiency, whatever its cause, retirement should be the invariable rule, but there will always remain in the Ceylon and every other service a residuum of amiable and inoffensive inefficiency, which cannot be treated in this draconic fashion without shocking the public opinion of the service." To meet the difficulty I have caused to be introduced into your pension regulations a provision from the Imperial Superannuation Act, which facilitates the retirement on pension of inefficient officers by empowering the Governor in Executive Council to grant a retiring allowance if he thinks the special circumstances justify it, even when a public officer who is removed from his office on the ground of inability to discharge efficiently the duties of his office is below the limit of age ordinarily entitling him to pension. Personally, I am inclined to believe that the interests of Government service would be still better served by the reduction to 50 of the age limit at which voluntary retirement should be permitted, but in the meantime, the new regulation which I have described has greatly strengthened the Governor's hand in dealing with what I may term non-culpable incompetency.

I should be sorry, however, if these remarks of mine were interpreted as implying that the general body, or even a large portion, of the Public Service of this Colony is inefficient; and it is a pleasure to me to close this part of my review by reminding you of the large number of gentlemen holding public positions in this Colony—quite an unprecedented number, I believe—who have in recent years received special proofs of the Sovereign's favour.

In connection with the subject of "honours," I may allude to the decision to allow the retention, in certain circumstances, of the title of "Honourable" by unofficial members of this Council. I consider it highly appropriate and fitting that men who have, at considerable sacrifice of time and leisure, generously devoted themselves to public affairs for many years together should be entitled to retain some distinguishing mark of appreciation of their public spirit during their residence in the Colony. I was very pleased when His Majesty the King approved my proposal that unofficial members who have had a continuous service of not less than ten years in the Council, or who are specially recommended by the

Governor, should be eligible to retain locally the title of "Honourable" on retirement or resignation. It is an additional pleasure to record that two of the members who have served in this Council during many years of my administration, Mr. J. N. Campbell and Mr. Giles F. Walker, have been the first to be granted the privilege.

NOTABLE EVENTS.

I have now finished my retrospect of local affairs during the last eight years, and I think you will agree with me that no effort has been spared to uphold for Ceylon the proud title of Premier Crown Colony of the Empire. But Gentlemen, the history of a colony is now no longer confined to the history of its own internal affairs. Since I first left England for your shores in the year 1896 there has been, as you all know, a very remarkable development of what I may call the Imperial instinct, a development which has received its imprimatur in the significant addition to the Royal title, in which the Sovereign is now designated as "King of the British Dominions beyond the Seas."

It would be interesting to trace the history of this change—probably one of the most far-reaching in its possible effects of all the changes of the Victorian era—but I must not allow myself to be drawn away by so tempting a subject. But the very fact that the ties which bind the colonies and the dependencies to the mother-country have never been so strong as they are to-day makes it appropriate, and indeed necessary, that I should on this occasion record the part which Ceylon has taken in the numerous events affecting the Empire in recent years.

[The Diamond Jubilee; the Death of Queen Victoria; the Accession of King Edward; the Visit of the Duke and Duchess of York; His Majesty's Illness and Coronation; Ceylon's share in the war, and its acceptance of 5,000 prisoners; and the 1899-1900 Famine Contribution to India are all reviewed.]

GENERAL CONDITION OF THE COLONY AND THE SOCIAL CONDITION OF THE PEOPLE.

I shall now endeavour to give you some idea of the changes in the social condition of the people during the last few years, as they present themselves to some of the provincial officers.

In the Western and Southern provinces, which have long been

under the influence of Western civilization, there are, as might be expected, no marked changes to record. Their general prosperity has continued unchecked, the revenue of the Western province in particular showing a notable advance, having risen from Rs. 1,614,356 in 1895 to Rs. 2,284,030 in 1902. There is one feature in the history of these provinces in recent years which should perhaps not be passed over: I mean the multiplication of local "associations" and "societies." The growth of such bodies is the inevitable outcome of our civilization, and although occasionally, through excess of zeal and misdirected energy, they hamper rather than promote the cause of progress, they should not be summarily condemned on that account. I consider that if they only encourage the people to take an intelligent interest in local matters, they perform a useful function, but I would remind those who are at the head of these associations that the more they refrain from mere criticism, and the more they endeavour to co-operate with those in authority, the greater will be the success of their efforts to further the cause which I believe they have at heart, namely, the welfare of the inhabitants of this Island.

The changes which have taken place in the social condition of the people during the last seven or eight years are more noticeable in the Central province, and the following remarks from the report of the Government Agent, Mr. J. P. Lewis, will, I think, be of general interest: "There are numerous indications," he says, "of the gradual adoption by the Kandyan of a fuller and freer mode of life. The appearance in villages of brick houses with tiled roofs, in place of thatched cottages of mud and wattle, and the greatly increased demand for meat and vegetables and other European foods, show that the villager of to-day has larger ideas of comfort than he had seven years ago, his wants are more numerous and more varied, and he is more ready to exert himself for their satisfaction. The substitution by the lower classes and castes of the fuller low-country dress for the loin cloth, and the adoption by the more prosperous of European dress and speech—though one can hardly regard these changes as 'improvements'—point to the same conclusion. The exclusive conservatism of a mountain people is yielding to the educating influence of the railway, and the Kandyan is becoming more cosmopolitan. His vision is no longer limited to his native village, or his ambitions circumscribed by the ancestral plot of

land. Intercourse with the enterprising settlers from the maritime provinces and familiarity with the complex life of neighbouring towns has broadened his mind and fostered the growth of a new commercial spirit. Although this passing of the old order is perhaps regrettable from a sentimental point of view, and is not without its demoralizing effects on a primitive type of people, the rapid increase of prosperity involving almost of necessity a temporary increase of crime, there can be no doubt that there has been on all sides material progress, and that the ultimate effects of the change noted will be to the permanent advantage of the people and the province. There has been a marked increase in the extent of land under cultivation, the acreage of cultivated land in the province having risen from 367,000 acres in 1895 to 385,000 in 1902. The extension of native garden cultivation has been especially marked. Considerable areas have been planted up by natives with tea, cacao, cardamoms, pepper, and other garden produce. In 1890 there was no cultivation of cacao by the natives, and but little in 1896. The returns, for 1902 give the acreage planted in cacao by natives as over 6,000. The case of tea is still more striking. In 1895 the tea land owned by villagers in Udalapata division consisted of some 320 acres, whereas the returns for this year show no less than 643 of tea as belonging to villagers, and the ratemahatmaya reports that there are few villagers in the division who do not own a small holding planted with tea. Nor is this division unique in this respect. The cultivation of vegetables for the local markets has also been widely taken up, and tobacco cultivation in the Dumbara valley is developing into an important industry, the acreage under tobacco having increased from 148 acres in 1895 to 561 in 1902. The advantages of this agricultural awakening are obvious. The villager can occupy himself profitably during the months in which his paddy fields do not require his attention; the lessons learnt in the cultivation of new products lead to improved methods in his old pursuits, with saving labour and increased returns. A portion of the profits of the tea garden is expended in manuring the paddy field—a practice previously undreamt of; the produce of the field suffices for the ordinary requirements of life, while the produce of the garden provides a substantial balance in hand which is at once an insurance against future want and an incentive to

further endeavour; the ability to save creates the desire to save and to invest; the Post Office Savings Bank is largely availed of, and fresh opportunities are sought for the investment of capital in trade and land. A further marked improvement has been noticed in some parts of the province as regards paddy cultivation, which is attributed to the effect of Ordinance No. 10 of 1901. The experiment recently inaugurated of making practical agriculture a subject of study in village schools should be productive of most beneficial results. The Kandyan villager of the rising generation will enter on the struggle for existence far better equipped than were his fathers, and better prepared mentally, morally, and socially for the duties and responsibilities of citizenship. The Kandyan has little leaning towards the manufactures. The dignity of land is paramount, and the highest caste is that of the cultivator. Ornamental workers in silver and brass were encouraged by the Kandyan kings, and handed down the practice of these crafts to their descendants. But the useful trades were not encouraged, for their want was not felt when every man built his own mud hovel and tilled his own plot of land. Now the increase of prosperity has necessitated the division of labour. To meet the demand for better built and better furnished houses the manufacture of bricks and tiles has been introduced from the low-country, and the carpentering trade has also established itself among Kandyans."

The Government Agent of Uva reports as follows : " The social condition of the people of the province has changed for the better, a change which is indicated by the increase in the population. The decrease of 3.9 per cent. reported at the census of 1891 was converted in 1901 into an increase of 17.3 per cent. The population at present numbers 186,674, of which nearly one-third (51,788) is the population of the estates, against 32,062 in 1891. Excluding the estate population, the district population has advanced by 6.1 per cent., from 127,109 to 134,886. As regards the material resources of the people, improvement may be inferred from the amounts realized by the sale of the arrack rents. The figures in round numbers were Rs. 105,000 in 1902, in comparison with Rs. 83,000 in 1896, a substantial rise. A similar deduction may be drawn from the proceeds of land sales, excluding years in which the land sold was mainly to estate owners.

Thus, the proceeds of 1900 were Rs. 6,000, whereas these of 1902 were Rs. 11,000, which seems to indicate an increase in the purchasing power of the people. In respect of crime, the condition of the people during the years under review remained normal, that is to say, it continued to be good. In the year 1901, Uva was the least criminal province but one in Ceylon, with a ratio of only one serious crime in every 2,784 of population. The number of criminal cases tried by the district court of Badulla fell from 29 in 1896 to 21 in 1901, and the number of persons convicted in the police court of Badulla from 532 in 1897 to 278 in 1901. These figures seem to indicate a decrease rather than an increase in crime in this non-criminal province. There have recently been satisfactory signs of private enterprise in the direction of spreading education, and arrangements were made in 1902 to establish four gansabhawa vernacular schools, to be conducted on exactly the same lines as Government vernacular schools. The entire cost will be borne by the people benefited. In other words, during last year alone there was an increase of 33 per. cent in vernacular schools, without any expense whatever to Government. This condition of affairs indicates a material improvement in the social condition of the people.

The most prominent features in the history of the province of Sabaragamuwa have been the rapid opening up of the district in tea, the acreage under cultivation having increased from 18,000 to 42,000. The plumbago and gemming trades have also flourished, especially the former, while there has also been a considerable extension of cocoanut and plantain cultivation. If the contemplated extension of the Kelani valley railway to Ratnapura is sanctioned, the coming years will no doubt witness a still more marked development in this thriving district.

There appear to have been no particular changes in the social condition of the people in the Eastern province, where we must look to the future for the fruits of the labours of the past seven years. Large sums have been spent on improving the means of communication and on other public works, and I have already described to you at length the extensive irrigation works in progress in this province. Nevertheless, in both these directions there is still room for further useful expenditure.

A proposal was mooted some time ago for cutting a channel

from the sea into Batticaloa lake through the spit of sand at the position of the so-called Dutch Bar, in order to provide Batticaloa with a harbour which would be available all the year round. I appointed a Committee to report on the subject after local inquiry, and on their recommendation a survey was made, on which Mr. Bostock, the Engineer in charge of the Colombo Harbour works, reported that the necessary works would involve an outlay of about Rs. 2,000,000, excluding the cost of a dredger. I did not consider that such an expenditure was warranted by the circumstances, and the proposal was abandoned.

An alternative project which has been pressed upon Government with much insistence by the Batticaloa planters, is that known as the re-opening of the Dutch canal, that is to say, the construction of a waterway to unite the Batticaloa lake with the Nattor river estuary, which was partially cut by the Dutch more than a hundred years ago. It is urged that such a canal would lead to the opening up of a very large extent of Crown land suitable both for paddy and cocoanut cultivation, and that in particular it would afford an excellent outlet for the produce of the 16,000 acres of paddy land now being opened under Vakanneri tank. On the other hand, it is contended that this land is very well served by the existing Batticaloa-Kalkudah road, and that native craft already take in cargo at Valaichenai, a place close to Vakanneri. Government have been asked to appoint a Commission to inquire and report on the scheme, and it may be worth while to do so. The question of cost is, however, an all-important one, and as no Commission could form an opinion of the merits of the scheme which would carry any weight in the absence of accurate surveys and estimates, I last year directed a detailed survey to be made. The plans have just been completed, and a reliable estimate of cost may therefore be expected shortly.

It is, however, probably in the development and the potentialities of the provinces through which the Northern railway will run that you are chiefly interested, and I shall make no apology therefore for quoting at some length from the reports of the revenue officers of the northern districts of the Island.

Of the North-Western province Mr. Burrows writes: "In

summing up results, the difficulty is that most of the improvements are so new that it is too early to expect definite marks of improvement. Take dispensaries, for instance. They are not all actually finished yet, nor would it be easy in any case to tabulate results for such a scheme; still there can be no doubt that a great change has been effected in the possibilities of medical help in one of the most unhealthy parts of the Island, and that European treatment and medicines are now placed within the reach of the poorest and most isolated villager. I have been able to note on my travels the beneficial results of this admirable policy, and the ordinary villager does not scruple to assign to it a marked diminution in parangi and fever cases, and to express his warm appreciation of what has been done for him. It must be noted that the work has by no means been done entirely by Government. The best part of the policy is that a spirit of self-help has been fostered as well; and money has been freely subscribed by the villagers to erect the very substantial buildings which Government supplies with doctors and medicines. The number of visits paid to these dispensaries during the last two years, if added together would amount to a great many thousands, showing the villagers' rapid appreciation of and confidence in this form of help; but beyond these generalities it is difficult to go,—difficult, that is, to gauge the actual effect of the change upon the health of the population.

“So with village tanks. The true scheme of restoration dates only from the time of Mr. Fisher, and we do not expect to complete it until the end of this year. The villager has hardly had time to appreciate the vast difference between a certain and an uncertain water-supply; he is still rubbing his shoulders from the hard work he has been forced to do, and it must be some time yet before he seriously contemplates opening up new land. But no one can doubt who looks at the irrigation map and travels through the country that a great work has been done here, which must of necessity raise the value of paddy land, and gradually increase the output of local rice. One point, too, is often forgotten which strikes me a good deal: we are keeping the people on the land and on *their* land. There is not the same tendency to abandon villages and go elsewhere in search of employment, to mortgage or sell paddy fields to the first speculative Moor who turns up, to plead abject poverty as an excuse for evading every sort of

local burden. But to translate all this into hard figures is at present impossible."

The Government Agent of the North-Central province furnishes some ~~very~~ interesting remarks on the probable effects of the Northern railway. He claims that nowhere during the last few years have the seeds of progress and development been sown more broadly than in the North-Central province, and after characterizing the railway as the starting point of a new era in its prosperity he goes on to say: "Already, while the railway is yet under construction, there are signs of the coming awakening. Numbers have been attracted to the province in search of employment, many of whom will doubtless either settle here, or at least acquire permanent interests. The villagers, too, have taken much more kindly than was expected to labour on the works. They have performed nearly all the jungle clearing and much of the earthwork along the line. They have thus earned several thousand of rupees. This accession to their means must create new wants and aspirations for a higher standard of living, and appetite will grow with what it feeds on. It will be a great day for the villager when he begins to feel enough of the divine discontent with the present lot to induce sustained effort to improve it. The prospect of the railway is making itself felt in many other directions. The value of land has been greatly enhanced, wages have risen, and capitalists are beginning to turn their attention to the province."

With regard to the social condition of the people generally, Mr. Booth reports: "There can be no doubt that the general health of the people of this province has improved in a most marked manner. Those who knew the province some years ago and now re-visit it are greatly struck with the contrast between the former wretched physique of the villager and his present fat, sleek condition. Parangi, which was once almost universal, though still prevalent, has greatly decreased, and is of a milder type. Fever, too, is less severe, the people having more stamina to withstand its attacks."

Mr. Booth, in concluding his lucid report, recalls the fact that the North-Central province once formed the "royal country" of the Kandyan kings, and was moreover the granary of Ceylon. "In the course of time, however," he says, "as the Kandyan power declined and its rulers were driven into the hills, the magnificent

irrigation systems of Nuwarakalawiya and Tamankaduwa fell into decay, the forest encroached on all sides upon the cultivated lands, and the small remnant of the once thriving people became stricken with famine and disease. Since the creation of the province in 1874 the constant efforts of the Government have been directed towards its regeneration. Much has been done. The indigenous villagers have been rescued from want and misery. But much more remains to be done in order to bring back population and reclaim the wilderness. The measures which have now been adopted are those best calculated to secure these all-important ends. There will indeed be no sudden transformation, but progress will be steady and sure. It needs no very great stretch of the imagination to picture this province once more enjoying a large measure—I was going to say of its old prosperity, but it will be something higher and better. The ancients had food and water but they had not railways and telegraphs, and, above all, they had not the blessings of liberty and equal justice which British rule secures to all subjects of the Empire."

Under the heading "Social changes" Mr. Levers writes: "The last six years have been a marked advance in a great change which is taking place in the social condition of the people. This may be described as a widespread rebellion against caste rules and caste prejudices. The old slave castes are rapidly becoming richer and more important. Not being so tied down to the land as most of their high caste neighbours, and being often possessed of more energy, they have every opportunity of outstripping them in the race for wealth. The great demand for labour on the different public works has combined with other causes to raise the wages of the ordinary cooly more than 50 per cent., but this is not counterbalanced by a rise in the price of the principal agricultural products of the province. Further, the rural Jaffnese are exhibiting a much greater tendency than formerly to travel beyond the peninsula, to Colombo and other places. The levelling influence of education is making itself felt. A good education can be obtained for almost nothing in Jaffna, owing to the competition of the various Christian educational bodies, and many of the lower caste people avail themselves of the opportunity. All these causes tend to increase the wealth and influence of the lower castes, and to break down caste prejudice. The low-caste people

do not see why they should any longer be debarred from certain privileges which their wealth or education would seem to justify, and to which they are legally entitled, and they are beginning to assert their rights, often forcibly. This is naturally resented by the higher castes, and the result is constant friction, sometimes developing into serious riots and even murder. In fact, this one factor accounts largely for the apparent increase in riot and crime during the last few years.

"To sum up, the period under review has seen several important changes in the administration of the province. With regard to the development of the Vanni, it may be said to have been a period of slow but steady progress, during which the retrograde movement observable for many years past has been definitely stopped. This period has seen the beginning of a new phase in the social development of the people, and also the beginning of a greater connection of Jaffna with the rest of Ceylon, which will eventually break down local exclusiveness and give a greater field for expansion to an enterprising and industrious people."

This, gentlemen, is a very cursory sketch of the economical condition of the Colony, but the facts which I have collected are, I think, sufficient evidence of increased and diffused wealth and prosperity. Undoubtedly the Colony, and especially the native population, is far more wealthy than it was eight years ago, and the wealth is more diffused. Of this increase and diffusion all branches of our revenue, our savings banks, the railway traffic, the consumption of luxuries, and the adoption of higher standards of living by the masses afford evidence which should satisfy and convince the most gloomy pessimist.

Gentlemen, I have finished my task, and I trust that I have satisfied you that the great opportunities which I have been so fortunate as to enjoy during the eight years of my administration have not been wasted or frittered away. Whatever your verdict may be, my conscience assures me that I have tried to do my duty, and that I have unremottingly placed at the disposal of the Colony such ability and capacity as I possess. I lay down the reins of office with gratitude for the good fortune which I have enjoyed, and with satisfaction at the bright prospects of this Colony. For

any success which has attended my administration I am indebted to the advice and assistance which I have received from my colleagues in the Executive Council and to the loyal and zealous co-operation of the Public Service in all its branches. I believe that it has also been greatly due to the conferences which I have held at regular intervals with the Government Agents. On the first occasion that I met these officers in conference I said: "It is most desirable that the Governor of Ceylon should have an opportunity of meeting the Government Agents, who are interested in carrying on the administration. They are the eyes and ears of the Governor and unless the Governor is in sympathy with the Government Agents and the Government Agents have full confidence in the Governor, the administration will be carried on under very difficult circumstances. I cannot imagine a better way of bringing about and securing their sympathy and confidence than by personal intercourse, because official correspondence, however ably conducted, can never fill that gap; and, therefore, I have great pleasure in continuing an institution which I believe was established by one of my predecessors, Sir William Gregory." These words, after a experience of seven years, I most heartily endorse. The Governor who attempts to legislate, or even to administer, on lines laid down at headquarters, without consulting the men who alone know what the practical effect of the proposals and measures will be, may make a very great mistake.

Last, but certainly not least, I am greatly indebted to the constant support and friendly consideration which I have always enjoyed at the hands of this Council. To the Unofficial Members, who so patriotically give their valuable time and labour to the service of the Colony without compensation or reward, I am particularly indebted. I deeply regret the approaching severance of our official association, which has been always so edifying and so fruitful of happy results. No fleeting cloud has for one moment obscured the friendliness of our relations, no jarring note has ever disturbed the harmony of our proceedings in this Council, no misunderstanding has at any time checked or impeded the transaction of public business. This happy record is due to our mutual appreciation of the fact that we all have had in view one common aim and object—the welfare and prosperity of this Island and its inhabitants—and that we have been steadfastly

making for the same goal, although occasionally some of us may have differed as to the best and shortest road by which to travel.

When I first met you, Gentlemen, I told you that I should always be ready to hear, nay to invite, your views and opinions, and to give them most careful consideration. I think that I have been true to this pledge. Never have I persisted in any legislative or administrative measure against your collective opinion. The same weight has been attached to your views, the same deference has been paid to your opinions, as if the fate of the Government depended on your vote. I came here from the Loyal Isle of Home Rule, where the Governor commands no majority in the Legislature, and where he must accordingly depend on persuasion, conciliation, and compromise in order to pass his measures and obtain the necessary supplies. That training has been useful to me here, and I have always tried to ignore, if I have not forgotten, the fact that I command in this chamber an official majority wherewith to enforce my views. I think, Gentlemen, that I am correct in saying that during the eight years of my rule I have never called the official vote to my assistance, but have tried, and tried successfully, to attain my end by appealing to your reason and good feeling, and also by subordinating my views and opinions to yours when this could be done without serious prejudice to the public interests. The records of this Council will show that the opinion of the unofficial members has often prevailed; that more than once bills have been withdrawn, and frequently bills have been substantially amended, in deference to their views. I may have been blamed for so much concession. I do not agree with my critics. The pulse of the people should be felt and its temperature tested. Even a useful and potent medicine may do harm if the patient is not prepared and ready for its assimilation; even a desirable law may be mischievous if it is inopportune or too far in advance of public opinion. Heroic measures should be kept for critical times, and to force a measure on an unprepared community does not necessarily prove the ruler to be strong.

Gentlemen, under your existing constitution you have most of the advantages of a self-governing community. You have complete command of your finances; no law can be passed without your concurrence; no wise Government can turn a deaf ear to your remonstrances.

The day has not yet dawned when this Colony can become self-governing, not because the people of Ceylon are not sufficiently loyal or intelligent, but because there is no unity of race. As one of my predecessors pointed out to this Council, democratic rule means the rule of the majority, and in a country of various races the rule of the majority would mean the rule of one of those races, and this would be far from acceptable to the others. No; your present constitution, if judiciously worked, seems to be admirably suited to your needs and requirements, and so long as men of light and leading, men respected and influential, can be found to serve in this Council, and so long as the Government listens to wise advice and reasonable representations, so long as it prefers persuasion and conciliation to force and dictation, so long will you enjoy the best elements of constitutional Government which are possible in an Eastern community of mixed races, creeds, and interests. During the session which has just expired you proposed a modification of your constitution by the admission on special occasions of unofficial members into the Executive Council. To that proposal I saw no objection; on the contrary, I anticipated much advantage in being able to command the advice and criticism of selected unofficial members of the community during the incubation of administrative or legislative measures, and accordingly I recommended its adoption to the Secretary of State. Mr. Chamberlain did not see his way to making the change, and the despatch containing his reasons has been laid before you. I trust that you will not be disappointed. Personally I do not consider the matter to be of much importance so long as the Governor continues to consult the unofficial members, in and out of the chamber, before he takes any important step.

Gentlemen, when on assuming office I first addressed you I promised to hold the scales of my administration evenly balanced, equally to guard the interests and equally to promote the welfare of all classes of His Majesty's subjects, whatever their race and whatever their creed. Have I redeemed this pledge? If I have failed to do so, I have failed in the most essential and vital duty which devolves upon the King's representative in an Eastern country. But the still small voice of conscience acquits me, for I know, whatever has been the outcome, that it has always been my unswerving aim, my inflexible intention, to be true to the dignity of

my position as His Majesty's representative, and to rise above the mists of bias and prejudice, more especially when racial and sectarian; and as on the eve of the surrender of my high office I religiously examine and analyze my policy and administration, I can honestly declare that never have I consciously permitted any racial bias or personal prejudice to influence or interfere with my treatment of any man or question.

In conclusion, let me again express my deep and sincere regret at the close of my administration and at my approaching departure from this beautiful Island, where I have spent eight happy, and I hope useful years of my life, and let me assure you that so long as I live I shall be a most interested and sympathetic observer of your destinies, and if ever in a private or public capacity I can render any humble service to this Island, which I have learnt to love so well, most readily and heartily will that service be rendered. That God's blessings may rest on Ceylon will ever be my fervent prayer.

WEST RIDGEWAY.

HINDU METAPHYSICS.—III.

DIALOGUE BETWEEN A BRAHMIN AND AN EUROPEAN.

Br. Have you been thinking any more on the topic of our conversation since we last part ?

Eur. I think I have been thinking; but you will scarcely allow that Europeans think at all.

Br. Verily; in Europe an Asiatic can hardly think. Your climate is too cold; and there is everywhere so much bustle and noise, that one cannot easily get the mind into the attitude of thought, and no sooner has a train of reasoning entered the mind than it is put to flight and dispersed in all directions by some common life movements, by which we are prevented from rising to anything of a transcendental eminence.

Eur. Pardon me, if there should be any want of respect in the suggestion, that you Hindoos think too slowly:—in England especially since the introduction of steam-engines and rail-roads everything is done with a most amazing rapidity; and as the mind sympathises with the body perhaps it may happen that as we can travel ten miles while you are travelling one, we can also think ten times as quickly as you can.

Br. It may be so, it becomes not me to doubt because I cannot refute it. I dare say that you do think very rapidly but as the rapidity of your locomotives produces accidents by explosions and oversets, to the great peril and manifest detriment of heads, necks, legs, and arms; so also your overhastiness in thinking frequently terminates in a blow-up or break-down of your theories. Your proverbs seem to indicate something of the kind, you say, "slow and sure";—"the more haste the worse speed"; with many others of the same complexion, which proverbs would never had any existence in your language but for your pernicious propensity to rapidity of movement. You may recollect how, in our first conversa-

tion, you presently admitted those principles on which I proved to you the Sankhya philosophy was founded; and yet when you saw that the tree of your philosophy would bear the Sankhya fruit, you immediately cut it down. This is a specimen of the rapidity of your thinking; no wonder then, that, when you wish to express any great quickness, you say as quick as thought."

Eur. There are certainly some propositions which may be rejected as soon as they are stated; such, for instance, as those which involve an absurdity or a contradiction in terms. You yourself would not require any long train of thought in order to deny the position that it is possible for the same thing to be and not to be at the same time.

Br. Certainly, I should not take a long time to deny it, because I do not think that I should be disposed to deny it.

Eur. Nay, now you are really laughing at me, and endeavouring to make experiment of the power of sophistry in contradicting one's senses.

Br. Ah, there now, pardon me, but you must allow me to say that you English people are too sensible.

Eur. Too sensible! You now are disposed to flatter. How is it possible for any one to be too sensible?

Br. Very possible indeed. You are too sensible to be rational.

Eur. Well again! That is the strangest assertion I have ever heard. Too sensible to be rational! I should think that a man only shown his sense by being rational, and that the most sensible would be the most rational man.

Br. I may mistake your language, but I should take it that *sensible* concerns the senses, and *rational* the reason.

Eur. We generally apply the word *sensible* to the understanding.

Br. You do? Then this is true which I have often heard of you, that the English philosophers materialize the spirit and spiritualize matter. Instead of deriving knowledge from mind, you imprison mind in matter and you measure the results of mind by the standard of the senses. Is not this manifestly wrong?

Eur. But surely it would be absurder still to suffer our minds to persuade us out of our senses.

Br. I see, I see how it is. You are, as I said, too sensible—you rest altogether in the bodily senses and you take their report only; and you do not use the mind at all, or you use it only in subserviency to the senses your very application of the word *sensible* to the understanding is a proof that your minds are animal.

Eur. But surely the understanding as well as the senses will tell you that it is impossible for the same thing to be and not to be at the same time.

Br. I am afraid, however, that even in this matter you attribute more to the senses than to the understanding. Now, if the senses could tell us all things, where would be the need of mind or understanding? Let me inquire, however, more particularly whether it be so really absurd as you seem to imagine to believe that is possible for the same thing to be and not to be at the same time. Do you think I can convince you?

Eur. I am almost sure you cannot.

Br. There now, you are arming yourself against conviction that in a very great degree the will influences the belief: now if you feel confident that I cannot convince you, you will not be convinced.

Eur. But I must be convinced if I cannot refute your arguments.

Br. Not so, indeed, for when you could not refute my arguments concerning knowledge and power, in our first conversation, you notwithstanding refused to admit my conclusions, and that simply because the theory did not fit your European prejudices.

Eur. Well then, I will endeavour to be as open to conviction as I possibly can. Let me therefore hear your reasoning, which will prove that it is possible for the same thing to be and not to be at the same time.

Br. There is an obstacle in the way which I must first remove, and that is your strong prepossession of the impossibility, for I take it for granted that you can never believe a thing to be possible till you have ceased to believe it to be impossible.

Eur. Clearly.

Br. Now you affirm it impossible for the same thing to be and not to be at the same time?

Eur. I do.

Br. If your affirmation then includes three ideas, you must, if you understand your affirmation, understand three ideas included in it.

Eur. To all practical purposes I think that I understand these three ideas perfectly well.

Br. Ah, my good friend, we are not talking about practical purposes, but concerning philosophical verities and fundamental truths. Tell me, I pray you, what you mean by being.

Eur. I apprehend that you hardly need any information on that point; our ideas of being must be pretty much alike. Everything that we can see, hear, feel, smell, taste, has a being.

Br. And is there nothing else which has a being? What say you concerning spirit, which can neither be heard, felt, smelt or tasted?

Eur. It may be thought of.

Br. Good;—then being includes whatever can be seen, heard, felt, smelt, tasted, or thought of what is not being?

Eur. The reverse of being.

Br. Not being includes therefore what can neither be seen, heard, felt, smelt, tasted, or thought of?

Eur. Stay—let me consider. May not that which is not be thought of?

Br. You are afraid of conceding too much, or in other words, you are afraid of being driven out of European theories.

Eur. Nay, I am only fearful lest I have given a false definition, of being.

Br. By a false definition, you mean one that will establish my philosophy and overthrow yours. Let it however, be for a moment conceded, that that which is not may be the subject of thought.

Eur. And surely it may, for I am think of many things which are not.

Br. Be it so; I have no objection. But let me ask you, when you think, must not your thoughts have an object?

Eur. Certainly.

Br. When, therefore, you think of that which is not, that which is not is the subject of your thoughts.

Eur. Most undoubtedly.

Br. Then you acknowledge that which is not is.

Eur. How can you say that I make any such acknowledgment?

Br. Because you say that that which is not the subject of your thoughts; and in so doing, you not only affirm that that which is not is, but you even go so far as to say what it is, *viz.*, the subject of your thoughts.

Eur. Then I had need find another definition of being, which I fear is not easy.

Br. Would you find it convenient to affirm that which is not, is not the subject of thought?

Eur. That would answer but little purpose, and I also fear would lead me into greater perplexities.

Br. So I fear. Or would you find any extrication from your difficulty by saying that nothing is not?

Eur. You bewilder me so, that I shall presently be scarcely able to distinguish between being and not being.

Br. I must acknowledge that you seem somewhat at a loss. Yet it is not by any means philosophical for you to affirm so positively that it is impossible for the same thing to be and not to be at the same time. When you find that you do not know what is being and what is not being. If then you will not affirm that nothing is, will you affirm that something is not? You must, I think, grant either that nothing is not, that something is not.

Eur. Surely I may safely affirm that something is not.

Br. And will you not also allow that something is?

Eur. Of course.

Br. And do you know everything that is?

Eur. I do not.

Br. Do you know everything which is not?

Eur. I do not.

Br. If you do not know everything that is, and everything is not, how can you know that there may not be something that is, and at the same time is not?

Eur. Because I cannot conceive how anything can be and not be—it is a contradiction in terms.

Br. Can you conceive how that which is, is?

Eur. I must acknowledge that I cannot.

Br. Neither and I suppose, can you conceive how that which is not, is not?

Eur. Certainly I cannot.

Br. And do you deny that something is, and something is not; and why, therefore, should you affirm that it is impossible for the same thing to be and not to be at the same time, because you cannot conceive how it can be? You seem to know neither being, nor not being, yet you make a proposition in which both are involved, and you are positive as to the truth of your proposition.

Eur. You may confound and perplex me by sophistical question, but I shall never be convinced that it is possible for the same thing to be and not to be at the same time?

Br. Do you know what time is?

Eur. I might tell you that time is the measure of duration, and then you might ask me what is a measure, so that at every step the difficulty would increase instead of diminishing. The profoundest philosophers have found themselves at a loss to define time, yet the plainest and most uneducated minds have a sufficient apprehension of what it is?

Br. Therefore you should be the less positive in persevering in your position, seeing that it includes three terms, not one of which, according to your own statement, you understand. For how can you state positively that it is impossible for the same thing to be and not to be at the same time, when you know not what being is, nor what time is?

Eur. I verily believe that, were you disposed to assert that whatever it is not, you would find no lack of argument. We may all well change a little the topic of discourse; for as you cannot get of my mind the impression that it is possible for the same thing to be at the same time, you of course will not be able to convince me of its possibility. I would now fain ask you have it is that you reckon affirmation owing the species of evidence by which men arrive at demonstration and certainty?

Br. Our means of knowledge are threefold and so are yours, and so must be the means of all imperfect beings: it is only for beings of a superior order to know by intuition. Our means are perception, induction, and affirmation. Perception and induction we have in ourselves, affirmation we have in others. Perception we have through the senses, induction by the mind, and affirmation is the result of the perception and induction of others.

16)? Why does He declare it to be impossible simultaneously to attain earthly and heavenly bliss and demands therefore voluntary poverty (Math. VI. 19-21, 24: XIX. 21-22. John XII. 25)? All these are nothing but the minor factors for purifying the mind so that concentration during prayer may be the sooner attained, which is the essential goal He aims at, charity, beneficence, piety, humbleness, &c., all tend to the same purpose. The goal of evolution is distinctly and expressly stated in the Holy Bible. "*That there should be time* no longer, (I Cor. XIII. 8.). Charity never faileth but whether there be prophecies, they shall fail; whether there be tongues they shall cease; *whether there be knowledge it shall vanish away.*"

The passages italicised in the above paragraph announce the ceasing of all change and the cessation of all consciousness (*i.e.*, awareness of the subject) in that condition, both abolishing individuality (Hartmann's *Philosophy of the Unconscious*. Vol. III, p. 83). The true explanation of the passages cannot be appreciated unless we take the meaning as given by Hartmann. To reach that state the Bible lays down the universal Code, 'commune with thyself,' which is nothing but an elementary form of concentration. Penance and repentance are necessary for the suffering mind to be doubly impressed with the idea of his desolation in order that his mind is easily concentrated.

In estimating the real and proximate value of *concentration*, we must pay particular attention to the underlying object, ordinarily hidden from the eyes of modern philosophers and which has thus made a sharp and distinct line of demarcation between the theoretical metaphysicians of Europe and the practical metaphysicians of India. When the Idealists of Europe attempt to speculate on a philosophical basis, the *final substratum* of man, it must be considered as assumed from the very nature of the question, that it is to remain *for ever* a speculation *only*, beyond the reach of any experimental verification. Surrounding all the various forms of idealistic doctrines there remains a translucent veil of doubt and confusion, engendered by a prejudice as regards the probable verification of that monistic theory by any experiment, physical or psychological. Not so with the doctrines of the Indian Sages. "If in theory, they argue, we arrive at the remarkable conclusion of unqualified monism, succinctly

stated as '*That I am*,' and if it is the unquestionable and irrefutable truth reached at by pure reasoning, then that truth, directly or indirectly, proximately or remotely, can be experimentally attained. If Reason attests the essential identity of the personal ego with the Supreme and Pure Self-consciousness, then, irrespective of the possibility of any experimental datum, from the theoretical and speculative stand-point, still we must consider the validity of the following propositions:—the *personal* ego cannot be the *Supreme* ego; reasonably it is true when the former is devoid of its personality; if so, is there any means by which the factors constituting the personality may be eliminated; can the *ego* be *believed* to remain devoid of its personality?

In order to get full and complete answers to all the above questions, we require a comprehensive knowledge of the *Turiya* or fourth stage of consciousness, symbolized by *Aum* and briefly explained in the previous pages. The truth of the actual existence of such a state of consciousness as described in the *Māndyukya Upanishad* is of the greatest importance not only to the vedantists themselves but also to the earnest metaphysicians in general. For, it turns away all metaphysical thoughts to one sure channel and gives the true tone to the theory of physical and post-mortem evolution. We cannot logically ignore, without seriously compromising our established idealistic doctrines, the probable truth of the experimental verification of the *Turiya* stage of consciousness, unless it contradicts the conditions of a true hypothesis established by Hobbes and Boyle. Nowhere in matters of such experimentation such a contradiction comes into existence; and in the face of these facts we cannot but admit the reasonableness of such experiments and the truth of the *Turiya* stage. The first step of that experiment is *concentration*; hence the supreme importance of a thorough knowledge of the sacred syllable *Aum*.

Positing for the present the final conclusion arrived at by the Vedānta philosophers, that the *ego* is essentially the absolute and the supreme Ego, we must deal with two of the abstrusest problems of philosophy. The first is, 'How and why the infinite consciousness seems to become the finite consciousness, the *individual*,' and the second, 'How can the individual consciousness be realized to be one with the supreme consciousness.' The

first problem is beyond all limits of scientific enquiry, but the second lies within the domain of experiment and its validity must stand or fall with the results of that experiment. Let us explain how this experiment is carried on in the mental laboratory.

The components of our *individuality* are, the senses and the sense-organs, mind, (or, rather memory), &c. If the Cartesian doctrine, *Cogito ergo sum*, or in other words, I exist, for I think, be the sole test of the existence of the individual consciousness, then *consciousness* disappears with *thought*, as in sleep. Whether or not something remains even after the abolition of all thoughts can be decided only when the mind is made devoid of all its contents by the gradual break of that link or harmony which establishes the connection between the inner consciousness and the objective world. The effect of *concentration* is to maintain this discontinuity. When all the thoughts are *concentrated* to one focus, only *one* crystallized and embodied *idea* remains for the time being; all outward sights and sounds vanish away, and gradually, with a prolonged culture, the *individuality* is merged into the individuality of that concentrated *idea*. This stage is called *Bisista* or dualistic *Samadhi*. A thorough study of the psychological character of this stage of consciousness brings to light the remarkable fact, which shakes not a little the criterion established by Descartes, that in the stage of dualistic *Somadhi*, the ideas 'I think' and 'I exist' vanish but not the consciousness itself. The very coming into being of the idea *I think* is prejudicial to the attainment of this stage; and this can be proved by anyone who practises concentration.

From the state of dualistic *Somadhi* to that of monastic (or Nirbikalpa) *Somadhi*, it is a slow and laborious process. Instead of concentrating all thoughts to one embodied idea, the individual is required to banish *all* thoughts. So long as our mind remains, one thought must give place to another and the above state can never be attained. But to an individual who has already attained the stage of dualistic *Samadhi*, the attempt to banish *all* thoughts and ideas altogether is not a laughable impossibility; this stage is not a psychological absurdity, or more strictly speaking beyond the province of psychology. The actual realization of this stage is the *experimentum crucis* which decides the question, whether

the essence of our individual consciousness or that which constitutes it, is related to mind as assumed by the European philosophers, or whether the former is essentially unrelated to the latter and therefore totally independent of space, time, and causality as demonstrated by the Indian metaphysicians. Together with solid arguments the Indian sages supply us with some experiments for the final realization, and we are bound to admit their conclusion unless European philosophers adduce experimental evidences, solid and sure enough, to break down the former demonstration. The existence of the *Turiya* stage is the *experimentum crucis*, more sure than the existence of the tangential cone of Fresnel's wave surface discovered by Hamilton, which has decided the undulatory theory of light in favour of Fresnel; and this transcendental or fourth stage of consciousness is attained by means of the process we have just now briefly explained. The characteristics of this stage is really transcendent. It is not sleep, nor does it bear the faintest resemblance to sleep; in sleep the ego is unconsciousness, in the *Turiya* stage there exists a positive, tangible something, an *indeterminate* reality which defies calculation. It is not dream, for, mind has already been banished for ever. It is not said to be *conscious*, for the relation between the perceiver and the perceived or the subject and the object does nowhere exist. It is changeless for it is above time and causality. What is it no one can describe, for "whether there be tongues they shall cease, whether there be knowledge it shall vanish away," for it is Real, Absolute, Self-consciousness; *Aum* therefore, is the symbolized Brahman.* The demonstration of the fourth stage

* To guard ourselves against the objection raised by many philosophers, that, even if the finite ego be theoretically the infinite ego, the actual realization cannot be a possible process but a *progressus ad infinitum*. This objection, recently raised by Mr. Inge in his "*Christian Mysticism*," is, logically incorrect, and a mathematical contradiction. As space does not allow us to point out at length the inconsistency of the above proposition, we shall as briefly as possible, explain our views here.

If the individual ego be really *finite*, it can have *no* relation with the Infinite and the Absolute, and the objection itself can never arise. If the former is related to the latter, the relation must be one of *identity*, for except the infinite nothing can be related to the infinite; or more strictly speaking, there can never exist anything beside the infinite except the infinite *itself*. The finitude of the individual ego, therefore, is only apparent and hence illusory, a *deceptive visus*. But the objectors argue: Supposing this finitude to be apparent and not real, we do not still conceive our infinitude; and the limitations imposed by the conditions of our very existence can never be totally removed. Scales after scales are to be removed from our ego, and as there exists an infinite gap between the finite and the infinite, this elimination still

of consciousness is not the sole monopoly of the Indian Sages. We have evidences enough, as we have seen, in the Holy Bible. St. Paul and St. Augustine preached in unambiguous language, the realization of the greatest bliss in that stage. Christian mystics of the Middle Ages, Erigena, Echart, Ruysbrock, Tauler, Suso, and John Smith, all unequivocally demonstrate the existence of that stage of "ecstatic union." Even Wordsworth and Tennyson unreservedly speak of "that serene and blessed wood," "the clearest of the clearest," "the weirdest of the weirdest," "in which death is a laughable impossibility" and in which the individual losing his personality merges into an ocean of supreme and infinite bliss.

The interpretations of the relation of *unity* between God and man, or the Father and the Son, as given by the above philosophers of the mystic school, have been taken and represented variously by the theologians of the modern day. The state of complete identification or the union of the Glory to God, is not generally recognized, and the testimonies of Erigena, Echart, Tauler, St. Paul and St. Augustine are regarded as over-coloured sentiments and ecstatic effusions. This view is to be found clearly maintained in Farrar's *History of Interpretations*, in Illingworth's *Personality, Human and Divine* and in Inge's *Christian Mysticism*. But before the general acceptance of the final decision of the Bampton Lectures, there is one argument in favour of the theory of complete identification which should be impartially considered with true scientific spirit: it is the solid philosophical basis of Pure Reason on which is erected the grand superstructure of the doctrine of complete identification. As the whole fabric of Vedantic Monism stands on this principle of

be a brief outline of this philosophical
religious teachers of the world. in times

one thing must we assume and for ever put before our eye, it is, that the Supreme Truth must not be self-contradictory, it cannot be a *round-square*; and we shall show that anything short of *complete identification* between the *individual* consciousness and the Supreme Consciousness makes the latter self-contradictory.

How can the *individual* consciousness lose itself in the fullness of the infinite consciousness, if such a thing is at all logically possible? And how can the former retaining at the same time its own individuality remain in the latter? There are only three ways in which the individual consciousness can be supposed to live in the Infinite consciousness:—It can live as a part only just as a planet or a star exists in universal space; it can exist entirely independent, just as a drop of water out of the ocean; and it can live side by side with the Infinite consciousness like the soaked water within a sponge. The last two inferences are utterly absurd and irrelevant, for there can exist nothing outside, and independent of, infinity. Where there is the drop of water there is no ocean neither there is any particle of the sponge, so that in such cases the infinitude of the infinite consciousness ceases to exist. The first inference can be likewise rejected but it requires a little consideration owing to its acceptance by many theologians.

If a star, or a planet, or a flower, exists in space, maintaining its individuality, then it must contain definite qualifications which differentiate it from other objects and from space in general. If the attributes of infinite space were those of a flower then the differentia would cease and the individuality of the flower would be destroyed just as a black object is invisible on a black background. It follows, therefore, that space is infinite in extent but not infinite in qualities, it is infinite in one sense but finite in another; it is only an *imperfect and incomplete infinity*. Reasoning in the same manner with regard to the existence of the Infinite consciousness—

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all alike present in It without any differentiating attribute which is our own creation. It transcends them.

THE CONCEPTION OF THE INFINITE.

What is then the essential nature of the *ego*? Is it finite? If so, whence does arise in us the innate conception of the infinity and this is surely *innate*. Space does not permit us to go at length into this domain of abstruse mathematical metaphysics, but we shall only give a brief outline of the method of how infinity is conceived by us and what does this signify.

Let us first of all analyse the nature of our conception of Infinity, with what it is constituted and what do we mean by a term which cannot be definitely explained. The school of Realism as represented by Locke considers the "idea of infinity" as only due to the idea of accumulation of parts. The infinite as represented by us is a "mere phrase," a monstrous offspring of other phrases whose real import has been misunderstood. The true import of such an infinity therefore is identically equal to the conglomeration of a vast number of parts, so great as that our mind quite unaccustomed to it as such, is troubled to reflect upon it; it is thus abbreviated for our conceptual convenience as *in-finite*. This may be the geometrical infinite, the result of experience, according to the Realistic School. But what about the other infinite, which we call for convenience the metaphysical infinite, that oversteps the bounds of geometrical infinite and hence cannot be represented as its offspring? What is this metaphysical infinite and who conceives it?

The conception of infinity by the finite intellect seems to us a logical contradiction. As it is *conceived*, it is not a conception in the proper sense of the term, yet it is a conception, none the worse. The characteristic of a positive conception is a certain differential. Here the conception is not a negative one, as the differential is — the *elimination of all finitude*. This conception of elimination of finitude is not the product of experience, as experience is itself based on an accumulation of finite conceptions. There is nothing in this accumulation which is absolutely sure as the *in-finite* is not a mere phrase, but a metaphysical entity such an accumulation of finite conceptions is a contradiction at every step. Because we cannot do anything without it; its

authority transcends all others whatever, for not only is it given in the constitution of our own consciousness, but it is impossible to imagine a consciousness so constituted as not to give it (Herbert Spencer).

Have we ever analysed the idea of "more-ness," the constitutional idea of "want," which is inherent in us? This is the idea of "Beyond." This singular phenomenon of our consciousness cannot be more singularly exemplified than in the various sorts of spatial conceptions. But what is the basis of these conceptions? Even such a skeptical critic as Karl Pearson (*The Grammar of Science*) is ready to admit that the "basis of our conceptions doubtless lies in perceptions; but in imagination we carry on perceptual processes to a limit which is itself not a perception; we can further associate groups of stored sense-impressions, and form ideas which correspond to nothing in our perceptual experience." Thus we can make some idea of a dragon or a Miltonian Hydra by the combinations of our stored sense-impressions of various other animals though the actual perception of such a monster is a chimera only. But have we any stored sense-impressions which can carry us beyond all limits of perceptions which can help us in any way to form an idea of a non-entity out of an entity? Non-Euclidean Geometry postulates that parallel straight lines meet at infinity, *i.e.*, to say, the angle between them will be absolutely Zero at infinity. Do we ever meet with any fact in nature, any explained phenomenon, which warrants us for supposing that in the limit the value of that angle will absolutely vanish? Our experience tells us that how much the angle may decrease it will still have a value. The mathematical conclusion postulated above is arrived at not by a mere association of groups of stored sense-impressions, but there is something existing in the background inherent in our consciousness, and supplied by Reason. Besides, the infinity, where two parallel straight lines meet, is no infinity at all, and unless we have a prior conception of infinity we cannot even suppose the lines to be produced to such a no-man's land, neither the value of the contained angle to absolutely vanish.

Let us now consider the two sides of a circle. It seems to us to involve a contradiction, a circle beginning at a finite distance, reaches infinity and then again returns to its

original position. Mathematicians may shirk difficulties, use the symbol of infinity with positive and negative signs, without looking at all at the possible contradictions, but appeal to his *Reason* not to his mathematical intellect and he will surely confess that the Infinite of Abstract Reason is not the infinity of geometry but of a higher order. The conception of this metaphysical infinity is proved by the very existence of the speculation itself; the very fact that it escapes conception is a proof of its infinitude and the solid essence by which our conception of it as infinite is itself constituted.

Our conception of Space in general is limited to three and only three dimensions. We can easily without any effort at all conceive a *volume* but not a *line* or a *surface*, as an one or a two dimensional object. Geometers can plainly specify a *line* as a conception of an one dimensional entity, but from our experiential point of view it is a mistaken notion. When we try to conceive a line, the thinker must conceive himself to stand outside it, and this very idea of outsidedness brings along with it a three-dimensional conception. Geometrical infinite, therefore is a three and only *three* dimensional infinite. But is Reason satisfied with such an infinite limited only by three dimensions? The Infinite of Pure Reason must be of infinite dimensions. We are not considering the perceptual existence of such higher dimensions but only the conceptual existence; and that it is actually conceived is sanctioned by Reason alone. The relation which subsists between *three-dimensions* and *infinite-dimensions* is of the same nature as that between *finite* and *infinite*. What warrants us to use such terms as "infinite dimensions," "escaping all limitations," "unsymbolized and indefinite," when all our definite modes of consciousness are limited to but three-dimensions? What induces us to speculate upon "indefinite consciousness of infinite dimensions," which mathematics cannot sanction, neither experiences admit? This impatience to speculate upon, to theorise and to bring within a rational circle that which cannot be circumscribed, makes the speculations themselves a sufficient guarantee of the truth of this infinite as a mode of existence. This infinite is conceived as a mode of existence, and this infinite is conceived as a mode of existence. This metaphysical infinity is not therefore and cannot be, the

bye-product of the geometrical infinite, but it is the ~~solid~~ background, in which rests all our conceptions of secondary infinities. In our conception of numbers, if the conception of infinite were not prior to all such conceptions, true infinite could never have arisen in our consciousness at all. For, "no piling up of finite quantities, no process *in indefinitum*, can ever result in infinite quantity: for, infinite quantity is essentially continuation beyond any conceivable limit whatever." In other words by summing up limited and finite quantities to any desirable or undesirable extent we cannot make the sum an infinite quantity, and this shows that infinity is not the outcome of finite quantities. It is an *a priori* and innate conception.

If we consider carefully the nature of our conception of an integral number, say for instance, 2, we can evade the question by saying that it is the sum of two units. But is the conception of unity, innate and *a priori*? If so, then, what is the nature of conception of a decimal number specially that of a recurring decimal? A recurring decimal is, in reality, the sum of an infinite series of converging fractions. If the proper and adequate conception of the one is the totality of the partial conceptions of each one of the fractions of that infinite series, then that conception has not yet been attained by any one of us. Consider again the exponential constant e . Its actual value can never be known. It is greater than two but less than three. To represent the *actual* value of e by *numerals*, would require infinite time. If it is urged that what we represent is only a very approximate value of it, it is still a partial and inaccurate conception. It will be a logical blunder to urge again that we have a partial conception of e . "For the effort of the intellect to carry on a summation to infinity brings along with it *some consciousness* of this infinite series as a whole, and, without that consciousness, be it definite or indefinite, abnormal or supra-abnormal, the effort and the consequent symbolization could never have arisen." If we are required to compare that of which we are conscious with that of which we are not conscious—the comparison itself being a matter of consciousness—then only possible through the consciousness of both (see *Spencer*). We are conscious that the e which we approximately put as the exponent of a is not the actual value, we are

conscious of the fact that however try we must we shall never reach the total value of the infinite series, we are conscious at the sametime of the divergence of that approximate value from that given by the series itself, therefore by implication we can affirm that we are conscious of the infinite series, and its real value although our power of symbolization is incapacitated by the very nature of our organic constitution.

Not only with this unique exponential constant, but with respect to every integral or fractional quantity an infinite series can arise. Fourier has discovered the mathematical method of such expansions. Any constant quantity, say for instance, 1, can easily be expanded into an infinite series of converging quantities. The actual and real value of this series is 1; it is a real and determinate conception. But the actual value of that series can never be reached by summation, even if it is carried to its furthest expansion. The conception of unity brings along with it a definite or an indefinite conception of *every* term of the series. Besides, the expansion of unity into an infinite series without raising in our consciousness a corresponding conception of it, is a philosophical incongruity. It must be admitted that conception proceeds symbolization. It is where the conception is not definite and determinate that the symbols take indeterminate and imaginary forms; and algebra furnishes us with a host of such indeterminate functions.

The whole problem now hinges upon the solution of the question, why does infinity come into the region of all finite conceptions and what is in the nature of our modes of consciousness that urges us onwards to define finitudes in the term of an infinite entity? Are we to suppose this method to be simply a mathematical monstrosity, the mere exhibition of a gigantic intellect beating upon the nature of human conception and no longer a part of human consciousness? In higher mathematics we are met with various sorts of indeterminate forms. Consideration of forms as we are enabled by other means to determine the value of an infinite quantity? The various conceptions give definite results, and are connected with the whole of our knowledge, and produce no contradiction. It is to suppose them

to be mere mathematical symbols devised by mathematical artists having no bearing upon the constitution of our consciousness, at the same time predicated that conception must proceed symbolization? Or do they bear a really more transcendent signification of which mathematics with dumb symbols can give no conceptual utterance waiting for further experimental evidence evolved out of a more highly developed being? What does this signify, this emanation of indefinite consciousness of infinity in our every finite idea? Who has first taught to the intellect of man that space and time are infinite? What gigantic impulse from unknown depths first gave impetus to the mathematical genius to conceive a finite and limited quantity in the terms of an infinite series? What decisive proofs have we so that we can predicate the universal proposition—"Matter and Energy are indestructible" unless we arrive at the actual end of matter? Every problem connected with the world-process is indeterminate and it rests on the solid background of the prior idea of infinity. Break down this prior idea and everything will fall to pieces and will become absolutely non-intelligible. All this signifies what we cannot easily comprehend, nor the human nature, owing to organic imperfections is ready to accept or acknowledge with the most complete acquiescence, though the conclusions of Pure Reason supply us with the most adequate weapons in its own defence. It signifies that our consciousness, in its *essence* is more intimately connected with the infinite than with the finite and the relative. It signifies that our inner consciousness is essentially infinite, whatever may our experiences teach and philosophers speak against it. Were it not so, then the conception of the metaphysical or Absolute Infinite would never come into conceptual existence out of the experiential conception of mathematical infinitudes.

The relation that can only obtain between an entity which is infinite and absolute and another which is not is that of the other-wise the relation itself vanishes into nothingness. To be conscious, in the psychological sense of the term, of any fact, of any event, or of any thought, is to get the consciousness of the fact, event, or thought, through the medium of the cerebral functions, or through the medium of the cerebral functions, or through the medium of the cerebral functions, or through the medium of the cerebral functions. We are not psychologically conscious of the fact, event, or thought, except through the medium of the cerebral functions, or through the medium of the cerebral functions, or through the medium of the cerebral functions, or through the medium of the cerebral functions.

consciousness, then the latter must transcend the former. *Consciousness* can never be a three-dimensional entity, for every three-dimensional thought is an object of consciousness. It is for this reason, that Huxley says, that consciousness is neither matter, nor motion, nor any conceivable modification of either; in other words, it is *transcendental*. To know *consciousness* in its entirety and in its essential aspect, is to make the infinite, an object of consciousness and to replace in the place of consciousness something which can transcend even infinity itself. Hence we can never have any *definite* conception of the Infinite and the Absolute although the infinity is within us.

Neither can we have a *definite* conception of an object, in the strictest sense of the term. Conceive an object, a cube of wood with sharp edges and angles. Such a cube is never conceived unless the space *beyond* and the thinker itself are conceived along with the object of consciousness. To make a *definite* conception is to make the cube, and only the cube an object of consciousness, and this can only happen when the subject thinks only the cube even forgetting his own presence as a thinker; that is to say, when the consciousness of the surrounding objects vanishes and only the cube remains in the consciousness. But this cannot be taken to be the psychological consciousness of the cube, for the subject himself has been identified with the object. Conception of a limited entity therefore is only possible when it is related with a conception of the beyond or the unlimited.

R K. B.

THE DEATH-BED OF A LION.

Every one may not be scientific; but every one may at least be a close observer of nature animate and nature inanimate. If plain people with good eyes and open hearts would but keep a note-book for their original observations, and jot down in few words the simple facts of life amongst God's lower creatures, the great men of the day would always have a good store of fine materials to deal with. The philosopher would stand at ease on the grand platform of truth, and build with stones ready hewn to his hand, instead of having to send his thoughts wide over the land in search of straw wherewith to make brick for the house of his wisdom, or perhaps, to gather osiers for the wattled wigwam of a nomadic theory.

"Do animals understand what death is? Do they recognise its coming signs?" asks the uninitiated. "No," says a gifted philosopher of our acquaintance, "you never see animals apprehending the meaning of death." Very well: then here is a fact.

The writer once strayed into a menagerie in the north of England, which had camped for a day or two in a little mountain metropolis. A large elderly lion was making an involuntary tour of the country in company with his wife and a fine family of young people. What an insult to put the desert monarch into such a vulgar cheap trap travelling carriage as this! The name caravan may sound fine enough out on the pathless sands; but here it is a thing of creaking boards, groaning wheels, and red and yellow paint. No group of palm-trees here; yet the caravan stops, and the camp is pitched in the form of a hollow square, amidst much desert talk; loud roars of satisfaction, growling comment, or shrill protest. One does not know what it all means—foreign tongues all of them. But one may guess at the subjects under remark; for great lumbering boxes are sorely aching with jolting over rough roads; long limbs are tired of being cramped in narrow cells; soft sides are bruised with bumping over the stones of civilised travel; the Bazarats of the

wilderness are chafing within their bars; strength and ferocity are fermenting for want of space; and the dinner-hour has long ago passed away without the dinner. True, there are strong signs of supper in one of the carriages, whose little pipe of a chimney has been smoking all day, but which is fierce now. There is an aggravating affatus of frying bacon pervading the place; and women in jackets, short flounced dresses, and laced leather boots, are clattering amongst tea-cups; while bold children with unkempt hair are talking low travelled wit to the gaping boys and girls who surround the step-ladder which acts stair-case to the lofty door. A platform is now thrown out from the front of the square; prodigious portraits of impossible monsters are unrolled and affixed; and, as if stimulated by the un-heard-of dangers with which they threaten society, crowds are daring enough to mount the steps. We slip with a vague feeling of awe behind the arras, and look around. An elephant with a hill of dun-coloured forehead, and with legs like pillars of Hercules, is swaying his significant trunk this way and that, over a stockade of bars. But what is the matter with that grand old lion? He is in pain, surely he is in pain. His breathing is short, and is drawn with effort; nostrils are spread wide, lips drawn back, and that great shaggy chest heaves uneasily. He is suffering from bronchitis, for he evidently cannot bear the keen air of the north. He is *couchant*; but now he lifts his head high, and looks round and round the show into the hundred faces of that unfeeling crowd, as if searching for sympathy. But no; they cannot read his eye of mute appeal; he is nothing to them but a great tawny lion with a shaggy mane and tufted tail. Suddenly he rear himself up to his full stature, throws back his grand head, utters a tremendous desert roar, and falls down heavily on his side—dead. Dead! with an imperial gesture, such as Cæsar's when he fell.

Look at the widow! she has been taking short and stately turns up and down the ten—very Jingo in her gait, and in her temper.

the prostrate figure, draws a bewildered look, and then throws herself down upon the ground. Presently, up comes the young king now. He draws his nostrils, flashes

his eyes, and snorts aloud. That was a long and searching gaze, truly! But at last he, too, flings himself down, with a great sounding flop, upon the dead body of the old lion. Up comes the coarse-looking keeper, and flogs away the widow and the son. But they watch their opportunity, stalk forward again, and throw themselves down in the same attitude of grief. Again the hateful whip, and again they spring to the further end of the den with a short impatient roar. Three times did this take place, and three times did they return to the same position, abandoning themselves to the same eloquent symbols of grief. Not many can say that they have been present at the death-bed of a lion, and never can the scene, so touching, and yet so grand, be forgotten by the writer.

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